FLEXIBLE WAVEGUIDE

Twistable–Flexible Waveguide

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type (EIA)	Freq Range (GHz)	VSWR	IL (dB/m)	Max Twist (deg/m)	Min Radius		Flange
						E–Plane(mm)	H–Plane(mm)	
SH–40WEL..PM	WR229	3.22–4.90	≤1.10	≤0.15	132	165	330	FDP/FDM
SH–48WEL...PM	WR187	3.94–5.99	≤1.10	≤0.18	155	136	272	FDP/FDM
SH–56WEL.PM	WR159	4.64–7.05	≤1.10	≤0.22	170	129	258	FDP/FDM
SH–70WEL...PM	WR137	5.38–8.17	≤1.15	≤0.25	108	102	204	FDP/FDM
SH–84WEL.PM	WR112	6.57–9.99	≤1.15	≤0.30	210	76	152	FBP/FBM
SH–100WEL...PM	WR90	8.20–12.40	≤1.15	≤0.40	240	66	127	FBP/FBM
SH–120WEL..PM	WR75	9.84–15.0	≤1.15	≤0.50	340	64	120	FBP/FBM
SH–140WEL...PM	WR62	11.9–18.0	≤1.15	≤0.65	350	54	105	FBP/FBM
SH–180WEL..PM	WR51	14.5–22.0	≤1.15	≤1.10	445	50	100	FBP/FBM
SH–220WEL...PM	WR42	17.6–26.5	≤1.25	≤1.30	465	41	82	FBP/FBM
SH–260WEL...PM	WR34	21.7–33.0	≤1.20	≤1.50	510	35	70	FBP/FBM
SH–320WEL..PM	WR28	26.5–40.0	≤1.25	≤2.00	465	38	76	FBP/FBM
SH–400WEL..	WR22	32.9–50.1	≤1.45	≤3.00	530	38	76	FUGP

Flexible Seamless Waveguide

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type (EIA)	Freq Range (GHz)	VSWR	IL (dB/m)	Pressure (Mpa)	Min Radius		Flange
						E–Plane(mm)	H–Plane(mm)	
SH–14WWEL...PM	WR650	1.13–1.73	≤1.10	≤1.12	≤0.02	600	1000	FDP/FDM
SH–22WWEL.PM	WR430	1.72–2.61	≤1.10	≤1.15	≤0.02	312	624	FDP/FDM
SH–26WWEL...PM	WR340	2.17–3.30	≤1.10	≤1.15	≤0.02	260	520	FDP/FDM
SH–32WWEL...PM	WR284	2.60–3.95	≤1.10	≤0.08	≤0.02	74.676	139.7	FDP/FDM
SH–40WWEL..PM	WR229	3.22–4.90	≤1.10	≤0.08	≤0.02	54.102	82.55	FDP/FDM
SH–48WWEL...PM	WR187	3.94–5.99	≤1.10	≤0.12	≤0.02	49.276	76.2	FDP/FDM
SH–56WWEL..PM	WR159	4.64–7.05	≤1.12	≤0.17	≤0.02	40.64	57.15	FDP/FDM
SH–70WWEL...PM	WR137	5.38–8.17	≤1.12	≤0.21	≤0.02	38.1	52.578	FDP/FDM
SH–84WWEL...PM	WR112	6.57–9.99	≤1.12	≤0.25	≤0.02	35.56	46.228	FBP/FBM
SH–100WWEL...PM	WR90	8.20–12.40	≤1.12	≤0.37	≤0.02	31.75	38.1	FBP/FBM
SH–120WWEL...PM	WR75	9.84–15.0	≤1.12	≤0.49	≤0.02	16.002	31.75	FBP/FBM
SH–140WWEL...PM	WR62	11.9–18.0	≤1.15	≤0.65	≤0.02	17.526	31.75	FBP/FBM
SH–180WWEL..PM	WR51	14.5–22.0	≤1.22	≤1.23	≤0.02	14.478	25.4	FBP/FBM
SH–220WWEL...PM	WR42	17.6–26.5	≤1.22	≤1.23	≤0.02	14.478	25.4	FBP/FBM
SH–260WWEL...PM	WR34	21.7–33.0	≤1.33	≤1.44	≤0.02	11.176	23.876	FBP/FBM
SH–320WWEL...PM	WR28	26.5–40.0	≤1.33	≤2.05	≤0.02	11.176	23.876	FBP/FBM
SH–400WWEL...	WR22	32.9–50.1	≤1.40	≤4.10	≤0.02	11.176	23.876	FUGP

STRAIGHT WAVEGUIDE

Rectangular Straight Waveguide

ELECTRICAL CHARACTERISTICS:

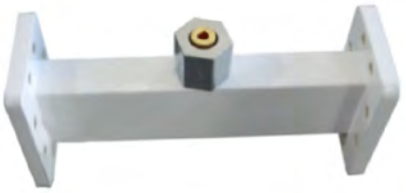
Part No.	WG Type (EIA)	Freq Range (GHz)	VSWR	Standard Length Range...(mm)	Flange	Material
SH-3WAL...PM	WR2300	0.32-0.49	≤ 1.05	0.2-500	FDP/FDM	Al
SH-4WAL...PM	WR2100	0.35-0.53	≤ 1.05	0.2-500	FDP/FDM	Al
SH-5WAL...PM	WR1800	0.41-0.62	≤ 1.05	0.2-500	FDP/FDM	Al
SH-6WAL...PM	WR1500	0.49-0.75	≤ 1.05	0.2-500	FDP/FDM	Al
SH-8WAL...PM	WR1150	0.64-0.98	≤ 1.05	0.2-500	FDP/FDM	Al
SH-9WAL...PM	WR975	0.75-1.15	≤ 1.05	0.2-500	FDP/FDM	Al
SH-12WAL....PM	WR770	0.96-1.46	≤ 1.05	0.2-500	FDP/FDM	Al
SH-14WAL...PM	WR650	1.13-1.73	≤ 1.05	0.2-2000	FDP/FDM	Al
SH-18WAL...PM	WR510	1.45-2.20	≤ 1.05	0.2-2000	FDP/FDM	Al
SH-22WAL...PM	WR430	1.72-2.61	≤ 1.05	0.1-2000	FDP/FDM	Al
SH-28WAL...PM	WR340	2.17-3.30	≤ 1.05	0.1-2000	FDP/FDM	Al
SH-32WAL...PM	WR284	2.60-3.95	≤ 1.05	0.1-2000	FDP/FDM	Al
SH-40WAL...PM	WR229	3.22-4.90	≤ 1.05	0.1-2000	FDP/FDM	Al
SH-48WAL...PM	WR187	3.94-5.99	≤ 1.05	0.1-2000	FDP/FDM	Al
SH-58WAL...PM	WR159	4.64-7.05	≤ 1.05	0.1-2000	FDP/FDM	Al
SH-70WAL...PM	WR137	5.38-8.17	≤ 1.10	0.1-2000	FDP/FDM	Cu
SH-84WAL...PM	WR112	6.57-9.99	≤ 1.10	0.1-2000	FBP/FBM	Cu
SH-100WAL...PM	WR90	8.20-12.40	≤ 1.10	0.1-2000	FBP/FBM	Cu
SH-120WAL...PM	WR75	9.84-15.0	≤ 1.10	0.1-2000	FBP/FBM	Cu
SH-140WAL...PM	WR62	11.9-18.0	≤ 1.10	0.1-1000	FBP/FBM	Cu
SH-180WAL...PM	WR51	14.5-22.0	≤ 1.10	0.1-1000	FBP/FBM	Cu
SH-220WAL...PM	WR42	17.6-26.7	≤ 1.10	0.1-600	FBP/FBM	Cu
SH-260WAL...PM	WR34	21.7-33.0	≤ 1.10	0.1-600	FBP/FBM	Cu
SH-320WAL...PM	WR28	26.5-40.0	≤ 1.10	0.1-500	FBP/FBM	Cu
SH-400WAL...	WR22	32.9-50.1	≤ 1.15	0.1-300	FUGP	Cu
SH-500WAL...	WR19	39.2-59.6	≤ 1.15	0.1-300	FUGP	Cu
SH-620WAL...	WR15	49.8-75.8	≤ 1.15	0.1-300	FUGP	Cu
SH-740WAL...	WR12	60.5-91.9	≤ 1.15	0.1-300	FUGP	Cu
SH-900WAL...	WR10	73.8-112	≤ 1.15	0.1-300	FUGP	Cu
SH-1200WAL...	WR8	92.2-140	-	0.1-100	FUGP	Cu
SH-1400WAL...	WR7	113-173	-	0.1-100	FUGP	Cu
SH-1800WAL..	WR5	145-220	-	0.1-100	FUGP	Cu
SH-2200WAL...	WR4	172-261	-	0.1-50	FUGP	Cu
SH-2600WAL...	WR3	217-330	-	0.1-50	FUGP	Cu

STRAIGHT WAVEGUIDE

Double Ridge Straight Waveguide

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type (EIA)	Freq Range (GHz)	VSWR	Standard Length Range...(mm)	Flange	Material
SH-84DRWAL...PM	WRD84	0.84-2	≤ 1.15	0.1-500	FP/FM	Al
SH-150DRWAL...PM	WRD150	1.5-3.6	≤ 1.15	0.1-500	FP/FM	Al
SH-200DRWAL...PM	WRD200	2-4.8	≤ 1.15	0.1-500	FP/FM	Al
SH-250DRWAL...PM	WRD250	2.6-7.8	≤ 1.15	0.1-500	FP/FM	Al
SH-350DRWAL...PM	WRD350	3.5-8.2	≤ 1.15	0.1-500	FP/FM	Al
SH-475DRWAL...PM	WRD475	4.75-11	≤ 1.15	0.1-500	FP/FM	Cu
SH-500DRWAL...PM	WRD500	5-18	≤ 1.15	0.1-500	FP/FM	Cu
SH-580DRWAL...PM	WRD580	5.8-16	≤ 1.15	0.1-500	FP/FM	Cu
SH-650DRWAL...PM	WRD650	6.5-18	≤ 1.15	0.1-500	FP/FM	Cu
SH-750DRWAL...PM	WRD750	7.5-18	≤ 1.15	0.1-500	FP/FM	Cu
SH-700DRWAL...PM	WRD700	7-18.5	≤ 1.15	0.1-500	FP/FM	Cu
SH-1100DRWAL...PM	WRD110	11-26.5	≤ 1.2	0.1-200	FP/FM	Cu
SH-1800DRWAL..PM	WRD180	18-40	≤ 1.2	0.1-200	FP/FM	Cu



Inflatable Straight Waveguide

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type (EIA)	Freq Range (GHz)	VSWR	Standard Length Range...(mm)	Flange	Material
SH-3QWAL...PM	WR2300	0.32-0.49	≤ 1.05	200	FDP/FDM	Al
SH-4QWAL...PM	WR2100	0.35-0.53	≤ 1.05	200	FDP/FDM	Al
SH-5QWAL...PM	WR1800	0.41-0.62	≤ 1.05	200	FDP/FDM	Al
SH-6QWAL...PM	WR1500	0.49-0.75	≤ 1.05	200	FDP/FDM	Al
SH-8QWAL...PM	WR1150	0.64-0.98	≤ 1.05	200	FDP/FDM	Al
SH-9QWAL...PM	WR975	0.75-1.15	≤ 1.05	200	FDP/FDM	Al
SH-12QWAL...PM	WR770	0.96-1.46	≤ 1.05	100	FDP/FDM	Al
SH-14QWAL...PM	WR650	1.13-1.73	≤ 1.05	100	FDP/FDM	Al
SH-18QWAL...PM	WR510	1.45-2.20	≤ 1.05	100	FDP/FDM	Al
SH-22QWAL...PM	WR430	1.72-2.61	≤ 1.05	100	FDP/FDM	Al
SH-26QWAL...PM	WR340	2.17-3.30	≤ 1.05	100	FDP/FDM	Al
SH-32QWAL...PM	WR284	2.60-3.95	≤ 1.05	100	FDP/FDM	Al
SH-40QWAL...PM	WR229	3.22-4.90	≤ 1.05	100	FDP/FDM	Al
SH-48QWAL...PM	WR187	3.94-5.99	≤ 1.05	100	FDP/FDM	Al
SH-58QWAL..PM	WR159	4.64-7.05	≤ 1.05	100	FDP/FDM	Al

STRAIGHT WAVEGUIDE

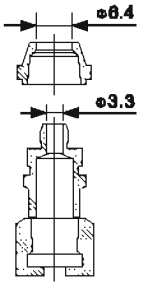
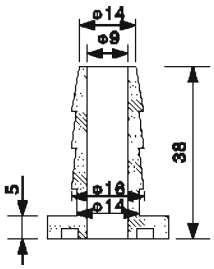
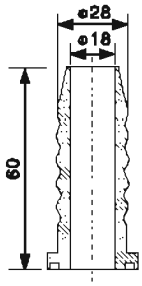
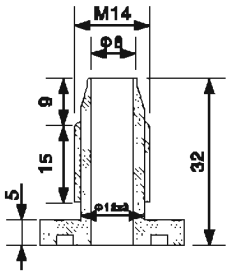
Inflatable Straight Waveguide

(Continued)

ELECTRICAL CHARACTERISTICS:

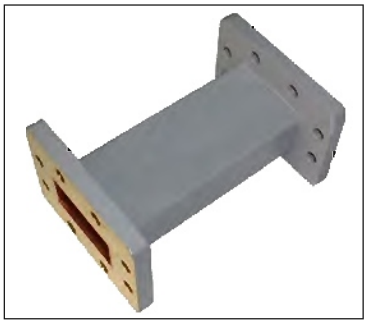
Part No.	WG Type (EIA)	Freq Range (GHz)	VSWR	Standard Length Range...(mm)	Flange	Material
SH–70QWAL...PM	WR137	5.38–8.17	≤ 1.10	50	FDP/FDM	Cu
SH–84QWAL...PM	WR112	6.57–9.99	≤ 1.10	50	FBP/FDM	Cu
SH–100QWAL...PM	WR90	8.20–12.40	≤ 1.10	50	FBP/FDM	Cu
SH–120QWAL...PM	WR75	9.84–15.0	≤ 1.10	50	FBP/FDM	Cu
SH–140QWAL...PM	WR62	11.9–18.0	≤ 1.10	50	FBP/FDM	Cu
SH–180QWAL...PM	WR51	14.5–22.0	≤ 1.10	50	FBP/FDM	Cu
SH–220QWAL...PM	WR42	17.6–26.7	≤ 1.10	50	FBP/FDM	Cu
SH–260QWAL...PM	WR34	21.7–33.0	≤ 1.10	50	FBP/FDM	Cu
SH–320QWAL...PM	WR28	26.5–40.0	≤ 1.10	50	FBP/FDM	Cu

Inflatable Mouth Specifications

Description	Self–Locking Type	Agnail Clamp Type	Pagoda Clamp Type	Thread Type
Outline Drawings				
Inner Diameter(mm)	Φ3.3	Φ9	Φ18	Φ8
Outer Diameter(mm)	Φ6.4	Φ16	Φ28	M14
Inner Diameter of Inflatable Tube(mm)	Φ4	Φ12	Φ26	Φ10
Outer Diameter of Inflatable Tube(mm)	Φ6	Φ16	Φ30	Φ14

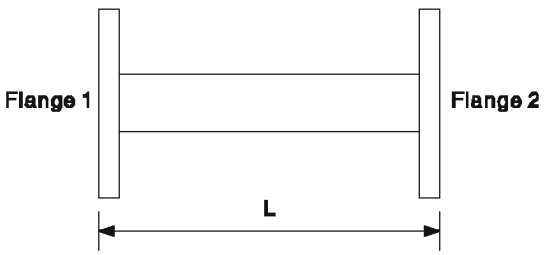
STRAIGHT WAVEGUIDE

Shinhom Microwave offers a standard product line of straight waveguides covering waveguide sizes WR10 thru WR2300. We also supply other special configurations to meet customer's specific requirements. For more information please contact us and discuss your needs with our sales engineer.



ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR (Max)	WG type		Flange	Material
			IEC	EIA		
SH-3WAL...	0.32-0.49	1.10	R3	WR2300	FDP/FDM	Al
SH-4WAL...	0.35-0.53	1.10	R4	WR2100	FDP/FDM	Al
SH-5WAL...	0.41-0.62	1.10	R5	WR1800	FDP/FDM	Al
SH-6WAL...	0.49-0.75	1.10	R6	WR1500	FDP/FDM	Al
SH-8WAL...	0.64-0.96	1.10	R8	WR1150	FDP/FDM	Al
SH-9WAL...	0.75-1.15	1.10	R9	WR975	FDP/FDM	Al
SH-12WAL...	0.96-1.46	1.05	R12	WR770	FDP/FDM	Al
SH-14WAL...	1.13-1.73	1.05	R14	WR650	FDP/FDM	Al
SH-18WAL...	1.45-2.20	1.05	R18	WR510	FDP/FDM	Al
SH-22WAL...	1.72-2.61	1.05	R22	WR430	FDP/FDM	Al/Cu
SH-26WAL...	2.17-3.30	1.05	R26	WR340	FDP/FDM	Al/Cu
SH-32WAL...	2.60-3.95	1.05	R32	WR284	FDP/FDM	Al/Cu
SH-40WAL...	3.22-4.90	1.05	R40	WR229	FDP/FDM	Al/Cu
SH-48WAL...	3.94-5.99	1.05	R48	WR187	FDP/FDM	Al/Cu
SH-58WAL...	4.64-7.05	1.05	R58	WR159	FDP/FDM	Al/Cu
SH-70WAL...	5.38-8.17	1.05	R70	WR137	FDP/FDM	Al/Cu
SH-84WAL...	6.57-9.99	1.05	R84	WR112	FBP/FBM/FBE	Al/Cu
SH-100WAL...	8.20-12.40	1.05	R100	WR90	FBP/FBM/FBE	Al/Cu
SH-120WAL...	9.84-15.0	1.05	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-140WAL...	11.9-18.0	1.05	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-180WAL...	14.5-22.0	1.05	R180	WR51	FBP/FBM/FBE	Al/Cu
SH-220WAL...	17.6-26.7	1.05	R220	WR42	FBP/FBM/FBE	Al/Cu
SH-260WAL...	21.7-33.0	1.05	R260	WR34	FBP/FBM/FBE	Al/Cu
SH-320WAL...	26.3-40.0	1.05	R320	WR28	FBP/FBM/FBE	Al/Cu
SH-400WAL...	32.9-50.1	1.10	R400	WR22	FUGP	Cu
SH-500WAL...	39.2-59.6	1.10	R500	WR19	FUGP	Cu
SH-620WAL...	49.8-75.8	1.10	R620	WR15	FUGP	Cu
SH-740WAL...	60.5-91.9	1.10	R740	WR12	FUGP	Cu
SH-900WAL...	73.8-112	1.10	R900	WR10	FUGP	Cu



Ordering Information

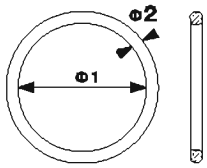
Example Part No: SH – 100 WAL 200 P M C

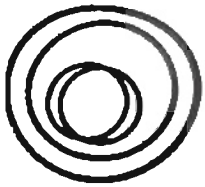
- SH: Shinhom Microwave
- 100: WG type:R100
- WAL: Product Type:Straight WG
- 200: Straight WG Length: L=200mm
- P: Flange 1 Type: P=FBP100
- M: Flange 2 Type: M=FBM100
- C: Material : A=Aluminum, C=Copper

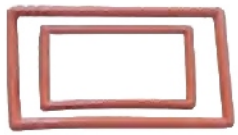
- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black/grey top coat

Accessories

Sealing Gasket



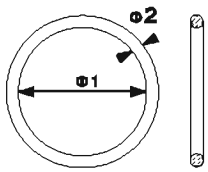




O–Ring
Standard O–ring

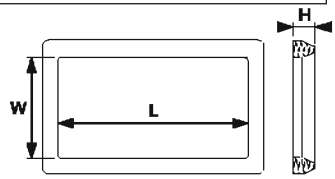
Part No.	WG Type EIA	Dimensions (Φ1XΦ2)	Part No.	WG Type EIA	Dimensions (Φ1XΦ2)
SH–32MFOA	WR284	101X5.4	SH–120MFO	WR75	28X2.8
SH–40MFOA	WR229	82X5.4	SH–140MFO	WR62	23.5X2.6
SH–48MFOA	WR187	68.5X3.5	SH–180MFO	WR51	20X2.4
SH–70MFOA	WR137	53X3.5	SH–220MFO	WR42	15.5X1.8
SH–84MFO	WR112	40X2.8	SH–320MFO	WR28	10.5X1.8
SH–100MFO	WR90	33X2.8			

Special O–ring



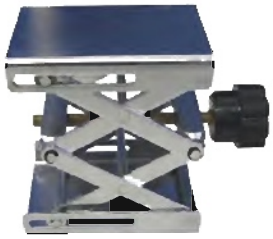
Part No.	Dimensions (Φ1XΦ2)	Part No.	Dimensions (Φ1XΦ2)
SH–MFO56.82	56.82X2.62	SH–MFO199.98	199.98X2.62
SH–MFO78.38	78.38X2.62	SH–MFO284.84	284.84X3
SH–MF101.3	101.3X3.53	SH–MFO321.06	321.06X3
SH–MFO114.4	114.4X3.1	SH–MFO321.4	321.4X3
SH–MFO120.94	120.94X2.62	SH–MFO331	331X3
SH–MFO124.5	124.5X3	SH–MFO422.1	422.1X3
SH–MFO143.8	143.8X3	SH–MFO463.4	463.4X3
SH–MFO146.68	146.68X2.62	SH–MFO486.2	486.2X3
SH–MFO162.7	162.7X3	SH–MFO493.6	493.6X3
SH–MFO164.28	164.28X3	SH–MFO499.5	499.5X3.53
SH–MFO194.38	194.38X3	SH–MFO539.1	539.1X3.53

D–Ring
Standard D–Ring



Part No.	WG Type EIA	Dimensions (L*W*H)	Part No.	WG Type EIA	Dimensions (L*W*H)
SH–14MFD	WR650	174.8X92.2X8.5	SH–58MFDL	WR159	45.5X25.5X3.5
SH–18MFD	WR510	136X72X5	SH–70MFD	WR137	41.2X22.2X4.9
SH–22MFDT	WR430	117X63X5	SH–70MFDL	WR137	39X20.5X3.53
SH–26MFDL	WR340	94X51.5X5	SH–84MFD	WR112	4.9X19X4.93
SH–32MFDL	WR284	77X75.5X3.5	SH–84MFDL	WR112	4.9X19X3.3
SH–32MFD	WR284	79.4X41.3X3.5	SH–100MFD	WR90	28.6X15.9X4.9
SH–40MFDL	WR229	63X34.5X3.5	SH–100MFDL	WR90	28X15.5X3.5
SH–48MFDL	WR187	53.9X26.5X3.5	SH–140MFD	WR62	20.6X12.7X4.9
SH–58MFD	WR159	46.7X26.5X4.9			

Accessories



Waveguide Adjustable Support

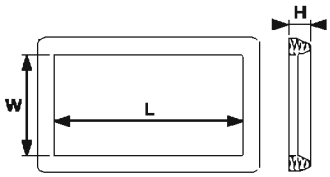
ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Dimensions (Φ1XΦ2)	Part No.	WG Type EIA	Dimensions (Φ1XΦ2)
SH-32MFOA	WR284	101X5.4	SH-120MFO	WR75	28X2.6
SH-40MFOA	WR229	82X5.4	SH-140MFO	WR62	23.5X2.6
SH-48MFOA	WR187	68.5X3.5	SH-180MFO	WR51	20X2.4
SH-70MFOA	WR137	53X3.5	SH-220MFO	WR42	15.5X1.8
SH-84MFO	WR112	40X2.6	SH-320MFO	WR28	10.5X1.8
SH-100MFO	WR90	33X2.6			

ELECTRICAL CHARACTERISTICS:

Part No.	Dimensions (Φ1XΦ2)	Part No.	Dimensions (Φ1XΦ2)
SH-MFO56.82	56.82X2.62	SH-MFO199.98	199.98X2.62
SH-MFO78.38	78.38X2.62	SH-MFO284.84	284.84X3
SH-MF101.3	101.3X3.53	SH-MFO321.06	321.06X3
SH-MFO114.4	114.4X3.1	SH-MFO321.4	321.4X3
SH-MFO120.94	120.94X2.62	SH-MFO331	331X3
SH-MFO124.5	124.5X3	SH-MFO422.1	422.1X3
SH-MFO143.8	143.8X3	SH-MFO463.4	463.4X3
SH-MFO148.68	148.68X2.62	SH-MFO486.2	486.2X3
SH-MFO162.7	162.7X3	SH-MFO493.6	493.6X3
SH-MFO164.28	164.28X3	SH-MFO499.5	499.5X3.53
SH-MFO194.38	194.38X3	SH-MFO539.1	539.1X3.53

D-Ring

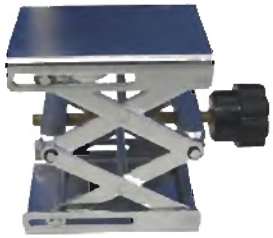


Standard D-Ring

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Dimensions (L*W*H)	Part No.	WG Type EIA	Dimensions (L*W*H)
SH-14MFD	WR650	174.8X92.2X8.5	SH-58MFDL	WR159	45.5X25.5X3.5
SH-18MFD	WR510	136X72X5	SH-70MFD	WR137	41.2X22.2X4.9
SH-22MFDT	WR430	117X63X5	SH-70MFDL	WR137	39X20.5X3.53
SH-26MFDL	WR340	94X51.5X5	SH-84MFD	WR112	4.9X19X4.93
SH-32MFDL	WR284	77X75.5X3.5	SH-84MFDL	WR112	4.9X19X3.3
SH-32MFD	WR284	79.4X41.3X3.5	SH-100MFD	WR90	28.8X15.9X4.9
SH-40MFDL	WR229	63X34.5X3.5	SH-100MFDL	WR90	28X15.5X3.5
SH-48MFDL	WR187	53.9X28.5X3.5	SH-140MFD	WR62	20.5X12.7X4.9
SH-58MFD	WR159	46.7X26.5X4.9			

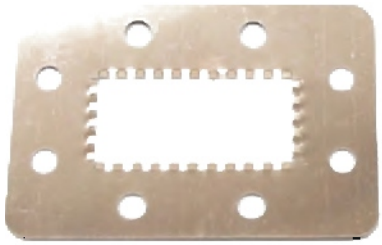
Accessories



Waveguide Adjustable Support

Part No.	Dimensions(mm)	Static Bearing
SH-SJPT-X	50x40x(37~93)	40(kg)
SH-SJPT-Z	70x55x(37~138)	40(kg)
SH-SJPT-D	100x75x(43~182)	50(kg)
SH-SJPT-T1	140x100x(55~255)	60(kg)
SH-SJPT-T2	160x120x(60~285)	80(kg)

WAVEGUIDE ANTI-LEAK GASKET



Waveguide Anti-leak Gasket

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type (EIA)	Freq Range (GHz)	Flange	Thickness (mm)	Material
SH-3WG0.2F	WR2300	0.32-0.49	FDP	0.2	Cu
SH-4WG0.2F	WR2100	0.35-0.53	FDP	0.2	Cu
SH-5WG0.2F	WR1800	0.41-0.62	FDP	0.2	Cu
SH-6WG0.2F	WR1500	0.49-0.75	FDP	0.2	Cu
SH-8WG0.2F	WR1150	0.64-0.98	FDP	0.2	Cu
SH-9WG0.2F	WR975	0.75-1.15	FDP	0.2	Cu
SH-12WG0.2F	WR770	0.96-1.46	FDP	0.2	Cu
SH-14WG0.2F	WR650	1.13-1.73	FDP	0.2	Cu
SH-18WG0.2F	WR510	1.45-2.20	FDP	0.2	Cu
SH-22WG0.2F	WR430	1.72-2.61	FDP	0.2	Cu
SH-26WG0.2F	WR340	2.17-3.30	FDP	0.2	Cu
SH-32WG0.2F	WR284	2.60-3.95	FDP	0.2	Cu
SH-40WG0.2F	WR229	3.22-4.90	FDP	0.2	Cu
SH-48WG0.2F	WR187	3.94-5.99	FDP	0.2	Cu
SH-58WG0.2F	WR159	4.64-7.05	FDP	0.2	Cu
SH-70WG0.2F	WR137	5.38-8.17	FDP	0.2	Cu
SH-84WG0.1F	WR112	6.57-9.99	FBP	0.1	Cu
SH-100WG0.1F	WR90	8.20-12.40	FBP	0.1	Cu
SH-120WG0.1F	WR75	9.84-15.0	FBP	0.1	Cu
SH-140WG0.1F	WR62	11.9-18.0	FBP	0.1	Cu
SH-180WG0.1F	WR51	14.5-22.0	FBP	0.1	Cu
SH-220WG0.1F	WR42	17.6-26.7	FBP	0.1	Cu
SH-260WG0.1F	WR34	21.7-33.0	FBP	0.1	Cu
SH-320WG0.1F	WR28	26.5-40.0	FBP	0.1	Cu
SH-400WG0.1F	WR22	32.9-50.1	FUGP	0.1	Cu
SH-500WG0.1F	WR19	39.2-59.6	FUGP	0.1	Cu
SH-620WG0.1F	WR15	49.8-75.8	FUGP	0.1	Cu
SH-740WG0.1F	WR12	60.5-91.9	FUGP	0.1	Cu
SH-900WG0.1F	WR10	73.8-112	FUGP	0.1	Cu

WAVEGUIDE ANTI-LEAK GASKET

Rectangular to Rectangular Waveguide Adapter Specials

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Port 1 WG Type (EIA)	Port 2 WG Type (EIA)	Flange	Material
SH-2240WA...	3.22-4.90	WR430	WR229	FDP	Al
SH-2658WA...	4.64-7.05	WR340	WR159	FDP	Al
SH-3270WA...	5.38-8.17	WR284	WR137	FDP	Al
SH-4084WA...	6.57-9.99	WR229	WR112	FDP/FBP	Al
SH-48100WA...	8.20-12.4	WR187	WR90	FDP/FBP	Al
SH-58120WA...	9.84-15.0	WR159	WR75	FDP/FBP	Al
SH-70140WA...	11.9-18.0	WR137	WR62	FDP/FBP	Al
SH-84180WA...	14.5-22.0	WR112	WR51	FBP	Cu
SH-100220WA...	17.6-26.7	WR90	WR42	FBP	Cu
SH-120260WA...	21.7-33.0	WR75	WR34	FBP	Cu
SH-140320WA...	26.5-40.0	WR62	WR28	FBP	Cu
SH-180400WA...	32.9-50.1	WR51	WR22	FBP/FUGP	Cu
SH-220500WA...	39.2-59.6	WR42	WR19	FBP/FUGP	Cu
SH-260620WA...	49.8-75.8	WR34	WR15	FBP/FUGP	Cu
SH-320740WA...	60.5-91.9	WR28	WR12	FBP/FUGP	Cu
SH-400900WA...	73.8-112	WR22	WR10	FUGP	Cu

Waveguide Attenuator

Attenuation	VSWR
3dB,6dB	≤1.25–1.35
10–30	≤1.15

Waveguide Fixed Attenuator

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range(GHz)	VSWR	Optional Attenuation (dB)	Flange	Material
SH–3WFA...	WR2300	0.32–0.49	≤1.25	3–30	FDP	Al
SH–4WFA...	WR2100	0.35–0.53	≤1.25	3–30	FDP	Al
SH–5WFA...	WR1800	0.41–0.62	≤1.25	3–30	FDP	Al
SH–6WFA...	WR1500	0.49–0.75	≤1.25	3–30	FDP	Al
SH–8WFA...	WR1150	0.64–0.98	≤1.25	3–30	FDP	Al
SH–9WFA...	WR975	0.75–1.15	≤1.25	3–30	FDP	Al
SH–12WFA...	WR770	0.96–1.46	≤1.25	3–30	FDP	Al
SH–14WFA...	WR650	1.13–1.73	≤1.25	3–30	FDP	Al
SH–18WFA...	WR510	1.45–2.20	≤1.25	3–30	FDP	Al
SH–22WFA...	WR430	1.72–2.61	≤1.25	3–30	FDP	Al
SH–26WFA...	WR340	2.17–3.30	≤1.25	3–30	FDP	Al
SH–32WFA...	WR284	2.60–3.95	≤1.25	3–30	FDP	Al
SH–40WFA...	WR229	3.22–4.90	≤1.25	3–30	FDP	Al
SH–48WFA...	WR187	3.94–5.99	≤1.25	3–30	FDP	Al
SH–58WFA...	WR159	4.64–7.05	≤1.25	3–30	FDP	Al
SH–70WFA...	WR137	5.38–8.17	≤1.25	3–30	FDP	Cu
SH–84WFA...	WR112	6.57–9.99	≤1.25	3–30	FBP	Cu
SH–100WFA...	WR90	8.20–12.40	≤1.25	3–30	FBP	Cu
SH–120WFA...	WR75	9.84–15.0	≤1.25	3–30	FBP	Cu
SH–140WFA...	WR62	11.9–18.0	≤1.25	3–30	FBP	Cu
SH–180WFA...	WR51	14.5–22.0	≤1.25	3–30	FBP	Cu
SH–220WFA...	WR42	17.6–26.7	≤1.25	3–30	FBP	Cu
SH–260WFA...	WR34	21.7–33.0	≤1.25	3–30	FBP	Cu
SH–320WFA...	WR28	26.5–40.0	≤1.25	3–30	FBP	Cu
SH–400WFA...	WR22	32.9–50.1	≤1.30	3–30	FUGP	Cu
SH–500WFA...	WR19	39.2–59.6	≤1.30	3–30	FUGP	Cu
SH–620WFA...	WR15	49.8–75.8	≤1.30	3–30	FUGP	Cu
SH–740WFA...	WR12	60.5–91.9	≤1.35	3–30	FUGP	Cu
SH–900WFA...	WR10	73.8–112	≤1.35	3–30	FUGP	Cu

Waveguide Attenuator

Attenuation	Frequency Response
3dB	≤ ±1.6dB
6dB	≤ ±1dB
10–60dB	≤ ±0.75dB

Waveguide Coupling Fixed Attenuator

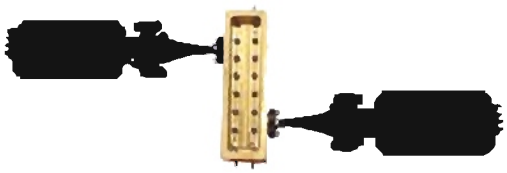
ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range(GHz)	VSWR	Optional Attenuation(dB)	Frequency Response(dB)	Flange	Material
SH-12WCFAX	WR770	0.96-1.46	≤1.20	3-60	±0.5-1.8	FDP	Al
SH-12WCFUAX	WR770	0.96-1.46	≤1.20	3-60	±0.5-1.8	FDP	Al
SH-14WCFAX	WR650	1.13-17.3	≤1.20	3-60	±0.5-1.8	FDP	Al
SH-14WCFUAX	WR650	1.13-1.73	≤1.20	3-60	±0.5-1.8	FDP	Al
SH-IBWCFAX	WR510	1.45-2.20	≤1.20	3-60	±0.5-1.8	FDP	Al
SH-18WCFUAX	WR510	1.45-2.20	≤1.20	3-60	±0.5-1.8	FDP	Al
SH-22WCFAX	WR430	1.72-2.61	≤1.20	3-60	±0.5-1.8	FDP	Al
SH-22WCFUAX	WR430	1.72-2.61	≤1.20	3-60	±0.5-1.8	FDP	Al
SH-20WCFAX	WR340	2.17-3.30	≤1.20	3-60	±0.5-1.8	FDP	Al
SH-26WCFUAX	WR340	2.17-3.30	≤1.20	3-60	±0.5-1.8	FDP	Al
SH-3ZWCFAX	WR284	2.60-3.95	≤1.20	3-60	±0.5-1.8	FDP	Al
SH-32WCFUAX	WR284	2.60-3.95	≤1.20	3-60	±0.5-1.8	FDP	Al
SH-40WCFAX	WR229	3.22-4.90	≤1.20	3-60	±0.5-1.8	FDP	Al
SH-40WCFUAX	WR229	3.22-4.90	≤1.20	3-60	±0.5-1.8	FDP	Al
SH-48WCFAX	WR187	3.94-5.99	≤1.20	3-60	±0.5-1.8	FDP	Al
SH-48WCFUAX	WR187	3.94-5.99	≤1.20	3-60	±0.5-1.8	FDP	Al
SH-58WCFAX	WR159	4.64-7.05	≤1.20	3-60	±0.5-1.8	FDP	Al
SH-58WCFUAX	WR159	4.64-7.05	≤1.20	3-60	±0.5-1.8	FDP	Al
SH-70WCFAX	WR137	5.38-8.17	≤1.20	3-60	±0.5-1.8	FDP	Cu
SH-70WCFUAX	WR137	5.38-8.17	≤1.20	3-60	±0.5-1.8	FDP	Cu
SH-B4WCFAX	WR112	6.57-9.99	≤1.20	3-60	±0.5-1.8	FBP	Cu
SH-84WCFUAX	WR112	6.57-9.99	≤1.20	3-60	±0.5-1.8	FBP	Cu
SH-100WCFAX	WR90	8.20-12.40	≤1.20	3-60	±0.5-1.8	FBP	Cu
SH-100WCFUAX	WR90	8.20-12.40	≤1.20	3-60	±0.5-1.8	FBP	Cu
SH-120WCFAX	WR75	9.84-15.0	≤1.20	3-60	±0.5-1.8	FBP	Cu
SH-120WCFUAX	WR75	9.84-15.0	≤1.20	3-60	±0.5-1.8	FBP	Cu
SH-140WCFAX	WR62	11.9-18.0	≤1.20	3-60	±0.5-1.8	FBP	Cu
SH-140WCFUAX	WR62	11.9-18.0	≤1.20	3-60	±0.5-1.8	FBP	Cu
SH-1BOWCFAX	WR51	14.5-22.0	≤1.20	3-60	±0.5-1.8	FBP	Cu
SH-1B0WCFUAX	WR51	14.5-22.0	≤1.20	3-60	±0.5-1.8	FBP	Cu
SH-220WCFAX	WR42	17.6-26.7	≤1.20	3-60	±0.5-1.8	FBP	Cu
SH-220WCFUAX	WR42	17.6-26.7	≤1.20	3-60	±0.5-1.8	FBP	Cu
SH-260WCFAX	WR34	21.7-33.0	≤1.20	3-60	±0.5-1.8	FBP	Cu
SH-260WCFUAX	WR34	21.7-33.0	≤1.20	3-60	±0.5-1.8	FBP	Cu
SH-320WCFAX	WR28	26.5-40.0	≤1.20	3-60	±0.5-1.8	FBP	Cu
SH-320WCFUAX	WR28	26.5-40.0	≤1.20	3-60	±0.5-1.8	FBP	Cu
SH-400WCFAX	WR22	32.9-50.1	≤1.20	3-60	±0.5-1.8	FUGP	Cu
SH-400WCFUAX	WR22	32.9-50.1	≤1.20	3-60	±0.5-1.8	FUGP	Cu
SH-500WCFAX	WR19	39.2-59.6	≤1.25	3-60	±0.5-1.8	FUGP	Cu
SH-500WCFUAX	WR19	39.2-59.6	≤1.25	3-60	±0.5-1.8	FUGP	Cu
SH-620WCFAX	WR15	49.8-75.8	≤1.25	3-60	±0.5-1.8	FUGP	Cu
SH-620WCFUAX	WR15	49.8-75.8	≤1.25	3-60	±0.5-1.8	FUGP	Cu
SH-740WCFAX	WR12	60.5-91.9	≤1.25	3-60	±0.5-1.8	FUGP	Cu
SH-740WCFUAX	WR12	60.5-91.9	≤1.25	3-60	±0.5-1.8	FUGP	Cu
SH-900WCFAX	WR10	73.8-112	≤1.25	3-60	±0.5-1.8	FUGP	Cu
SH-900WCFUAX	WR10	73.8-112	≤1.25	3-60	±0.5-1.8	FUGP	Cu

Waveguide Attenuator

High Power Waveguide CouplingFixed Attenuator

Attenuation	Frequency Response
3dB	≤ ±1.8dB
6dB	≤ ±1dB
10–60dB	≤ ±0.75dB



ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	VSWR	Optional Attenuation(dB)	Frequency Response(dB)	Avg Power Range(W)	Flange	Material
SH-12WHPCFA...	WR770	0.96–1.46	≤1.20	3–60	±0.5–1.8	10–4000	FDP	Al
SH-14WHPCFA...	WR650	1.13–1.73	≤1.20	3–60	±0.5–1.8	10–4000	FDP	Al
SH-18WHPCFA...	WR510	1.45–2.20	≤1.20	3–60	±0.5–1.8	10–4000	FDP	Al
SH-22WHPCFA...	WR430	1.72–2.61	≤1.20	3–60	±0.5–1.8	10–4000	FDP	Al
SH-26WHPCFA...	WR340	2.17–3.30	≤1.20	3–60	±0.5–1.8	10–4000	FDP	Al
SH-32WHPCFA...	WR284	2.60–3.95	≤1.20	3–60	±0.5–1.8	10–4000	FDP	Al
SH-40WHPCFA...	WR229	3.22–4.90	≤1.20	3–60	±0.5–1.8	10–4000	FDP	Al
SH-48WHPCFA...	WR187	3.94–5.99	≤1.20	3–60	±0.5–1.8	10–4000	FDP	Al
SH-58WHPCFA...	WR159	4.64–7.05	≤1.20	3–60	±0.5–1.8	10–4000	FDP	Al
SH-70WHPCFA...	WR137	5.38–8.17	≤1.20	3–60	±0.5–1.8	10–3000	FDP	Cu
SH-84WHPCFA...	WR112	6.57–9.99	≤1.20	3–60	±0.5–1.8	10–3000	FBP	Cu
SH-100WHPCFA...	WR90	8.20–12.40	≤1.20	3–60	±0.5–1.8	10–3000	FBP	Cu
SH-120WHPCFA...	WR75	9.84–15.0	≤1.20	3–60	±0.5–1.8	10–3000	FBP	Cu
SH-140WHPCFA...	WR62	11.9–18.0	≤1.20	3–60	±0.5–1.8	10–1000	FBP	Cu
SH-180WHPCFA...	WR51	14.5–22.0	≤1.20	3–60	±0.5–1.8	10–1000	FBP	Cu
SH-220WHPCFA...	WR42	17.6–26.7	≤1.20	3–60	±0.5–1.8	10–600	FBP	Cu
SH-260WHPCFA...	WR34	21.7–33.0	≤1.20	3–60	±0.5–1.8	10–600	FBP	Cu
SH-320WHPCFA...	WR28	26.5–40.0	≤1.20	3–60	±0.5–1.8	10–600	FBP	Cu
SH-400WHPCFA...	WR22	32.9–50.1	≤1.20	3–60	±0.5–1.8	10–600	FUGP	Cu
SH-500WHPCFA...	WR19	39.2–59.6	≤1.25	3–60	±0.5–1.8	10–300	FUGP	Cu
SH-620WHPCFA...	WR15	49.8–75.8	≤1.25	3–60	±0.5–1.8	10–300	FUGP	Cu
SH-740WHPCFA...	WR12	60.5–91.9	≤1.25	3–60	±0.5–1.8	10–200	FUGP	Cu
SH-900WHPCFA...	WR10	73.8–112	≤1.25	3–60	±0.5–1.8	10–200	FUGP	Cu

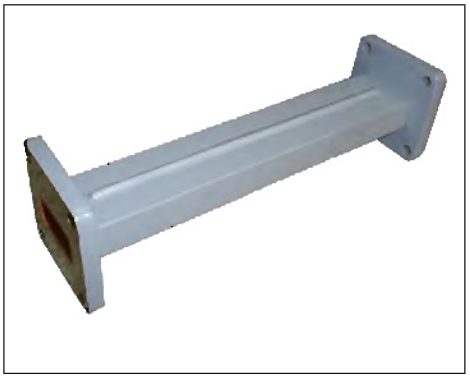
Waveguide Attenuator

Wavequide Variable Attenuator

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	VSWR	Optional Attenuation (dB)	Flange	Material
SH-12WVA30	WR770	0.96-1.46	≤1.25	0-30	FDP	Al
SH-14WVA30	WR650	1.13-1.73	≤1.25	0-30	FDP	Al
SH-18WVA30	WR510	1.45-2.20	≤1.25	0-30	FDP	Al
SH-22WVA30	WR430	1.72-2.61	≤1.25	0-30	FDP	Al
SH-26WVA30	WR340	2.17-3.30	≤1.25	0-30	FDP	Al
SH-32WVA30	WR284	2.60-3.95	≤1.25	0-30	FDP	Al
SH-40WVA30	WR229	3.22-4.90	≤1.25	0-30	FDP	Al
SH-48WVA30	WR187	3.94-5.99	≤1.25	0-30	FDP	Al
SH-58WVA30	WR159	4.64-7.05	≤1.25	0-30	FDP	Al
SH-70WVA30	WR137	5.38-8.17	≤1.25	0-30	FDP	Cu
SH-84WVA30	WR112	6.57-9.99	≤1.25	0-30	FBP	Cu
SH-100WVA30	WR90	8.20-12.40	≤1.25	0-30	FBP	Cu
SH-120WVA30	WR75	9.84-15.0	≤1.25	0-30	FBP	Cu
SH-140WVA30	WR62	11.9-18.0	≤1.25	0-30	FBP	Cu
SH-180WVA30	WR51	14.5-22.0	≤1.25	0-30	FBP	Cu
SH-220WVA30	WR42	17.6-26.7	≤1.30	0-30	FBP	Cu
SH-260WVA30	WR34	21.7-33.0	≤1.30	0-30	FBP	Cu
SH-320WVA30	WR28	26.5-40.0	≤1.30	0-30	FBP	Cu
SH-400WVA30	WR22	32.9-50.1	≤1.30	0-30	FUGP	Cu
SH-500WVA30	WR19	39.2-59.6	≤1.30	0-30	FUGP	Cu
SH-620WVA30	WR15	49.6-75.8	≤1.30	0-30	FUGP	Cu
SH-740WVA30	WR12	60.5-91.9	≤1.30	0-30	FUGP	Cu
SH-900WVA30	WR10	73.8-112	≤1.30	0-30	FUGP	Cu

WAVEGUIDE ATTENUATOR



Waveguide Fixed Attenuator

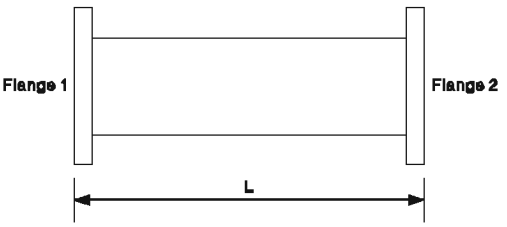
Shinhom Microwave offers a series of rectangular waveguide attenuators. Typical Attenuation values are 3dB, 6dB, 10dB, 20dB and 30dB (other attenuation values available, consult sales engineers for details). The assembly construction includes a precision element for optimum electrical performance, but note that Attenuation vs. Frequency can vary greatly depending on the attenuation at a given frequency. Waveguide Fixed Attenuators with normal and high power units are also available. For more information feel free to call us and discuss your needs with one of our sales engineers.

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR (Max)	Power (W)	Attenuation (dB)	WG Type		Flange	Material
					IEC	EIA		
SH-14WFA...	1.13-1.73	1.20	2	3/6/10/20/30	R14	WR650	FDP/FDM	Al
SH-18WFA...	1.45-2.20	1.20	2	3/6/10/20/30	R18	WR510	FDP/FDM	Al
SH-22WFA...	1.72-2.61	1.20	2	3/6/10/20/30	R22	WR430	FDP/FDM	Al/Cu
SH-26WFA...	2.17-3.30	1.20	2	3/6/10/20/30	R26	WR340	FDP/FDM	Al/Cu
SH-32WFA...	2.60-3.95	1.15	2	3/6/10/20/30	R32	WR284	FDP/FDM	Al/Cu
SH-40WFA...	3.22-4.90	1.15	2	3/6/10/20/30	R40	WR229	FDP/FDM	Al/Cu
SH-48WFA...	3.94-5.99	1.15	2	3/6/10/20/30	R48	WR187	FDP/FDM	Al/Cu
SH-58WFA...	4.64-7.05	1.15	2	3/6/10/20/30	R58	WR159	FDP/FDM	Al/Cu
SH-70WFA...	5.38-8.17	1.15	2	3/6/10/20/30	R70	WR137	FDP/FDM	Al/Cu
SH-84WFA...	6.57-9.99	1.15	2	3/6/10/20/30	R84	WR112	FBP/FBM/FBE	Al/Cu
SH-100WFA...	8.20-12.40	1.15	2	3/6/10/20/30	R100	WR90	FBP/FBM/FBE	Al/Cu
SH-120WFA...	9.84-15.0	1.15	2	3/6/10/20/30	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-140WFA...	11.9-18.0	1.15	2	3/6/10/20/30	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-180WFA...	14.5-22.0	1.15	2	3/6/10/20/30	R180	WR51	FBP/FBM/FBE	Al/Cu
SH-220WFA...	17.6-26.7	1.20	2	3/6/10/20/30	R220	WR42	FBP/FBM/FBE	Al/Cu
SH-260WFA...	21.7-33.0	1.20	2	3/6/10/20/30	R260	WR34	FBP/FBM/FBE	Al/Cu
SH-320WFA...	26.3-40.0	1.20	2	3/6/10/20/30	R320	WR28	FBP/FBM/FBE	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.
** Nominal Attenuation Accuracy: ± 0.5dB
Frequency Sensitivity: ± 0.7dB

Ordering Information



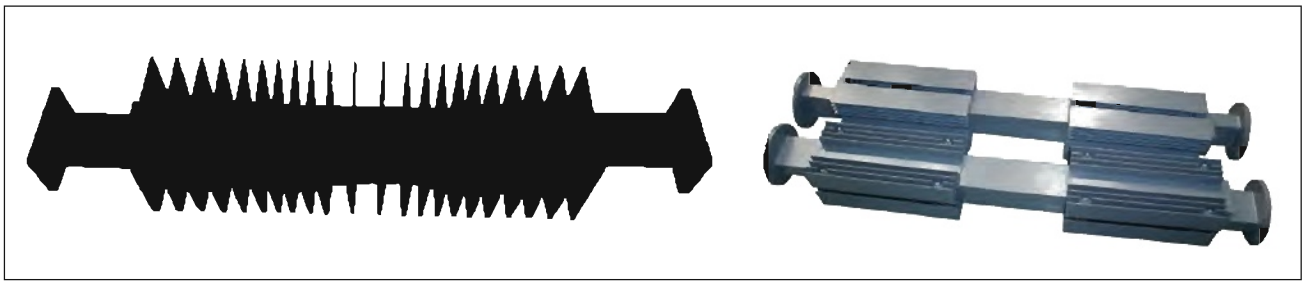
Example Part No: SH – 100 WHPL 300 M A

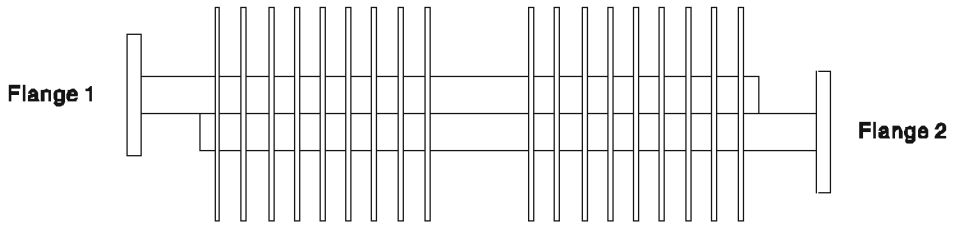
- SH: Shinhom Microwave
- 100: WG type:R100
- WHPL: Product Type:WG High Power Termination
- 300: Product Handing(Max): 300W(Avg)
- M: Flange Type:M=FBM100
- A: Material : A=Aluminum, C=Copper

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

WAVEGUIDE ATTENUATOR

Waveguide High Power Fixed Attenuator





ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR (Max)	Power (W)	Attenuation (dB)	WG Type		Flange	Material
					IEC	EIA		
SH-48WHPFA...	5.4-5.8	1.25	50	10/20	R48	WR187	FDP/FDM	Al/Cu
SH-70WHPFA...	5.85-7.025	1.20	500	55	R70	WR137	FDP/FDM	Al/Cu
SH-100WHPFA...	8.5-9.6	1.10	250	10	R100	WR90	FBP/FDM/FBE	Al/Cu
SH-120WHPFA...	9.84-15.0	1.15	50	10/20/30	R120	WR75	FBP/FDM/FBE	Al/Cu
SH-140WHPFA...	14.5-15.5	1.25	100	40	R140	WR62	FBP/FDM/FBE	Al/Cu
SH-320WHPFA...	26.3-40.0	1.25	20	10	R320	WR28	FBP/FDM/FBE	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.
** Nominal Attenuation Accuracy: ± 0.5dB
Frequency Sensitivity: ± 0.7dB

Ordering Information

Example Part No: SH – 100 WHPFA 30 P M A 250

- SH: Shinhom Microwave
- 100: WG type:R100
- WHPFA: Product Type:WG High Power Termination
- 30: Attenuation: 30dB
- P: Flange 1 Type:P=FBP100
- M: Flange 2 Type:M=FBM100
- A: Material : A=Aluminum C=Copper
- 250: Handing Power:250W(CW)

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

WAVEGUIDE BEND

Waveguide ARC Bend

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type (EIA)	Freq Range (GHz)	VSWR	Standard Dimensions (AxB)mm	Min Dimensions (AxB)mm	Flange	Material
SH-22WEBAXBPM	WR430	1.72-2.61	≤ 1.10	150X150	145X145	FDP/FDM	Al
SH-22WHBAXBPM	WR430	1.72-2.61	≤ 1.10	150X150	150X150	FDP/FDM	Al
SH-26WEBAXBPM	WR340	2.17-3.30	≤ 1.10	100X100	80X80	FDP/FDM	Al
SH-26WHBAXBPM	WR340	2.17-3.30	≤ 1.10	180X180	150X150	FDP/FDM	Al
SH-32WEBAXBPM	WR284	2.60-3.95	≤ 1.10	100X100	100X100	FDP/FDM	Al
SH-32WHBAXBPM	WR284	2.60-3.95	≤ 1.10	150X150	150X150	FDP/FDM	Al
SH-40WEBAXBPM	WR229	3.22-4.90	≤ 1.10	80X80	80X80	FDP/FDM	Al
SH-40WHBAXBPM	WR229	3.22-4.90	≤ 1.10	100X100	100X100	FDP/FDM	Al
SH-48WEBAXBPM	WR187	3.94-5.99	≤ 1.10	80X80	70X70	FDP/FDM	Al
SH-48WHBAXBPM	WR187	3.94-5.99	≤ 1.10	80X80	75X75	FDP/FDM	Al
SH-58WEBAXBPM	WR159	4.64-7.05	≤ 1.10	80X80	65X65	FDP/FDM	Al
SH-58WHBAXBPM	WR159	4.64-7.05	≤ 1.10	80X80	80X80	FDP/FDM	Al
SH-70WEBAXBPM	WR137	5.38-8.17	≤ 1.10	50X50	50X50	FDP/FDM	Cu
SH-70WHBAXBPM	WR137	5.38-8.17	≤ 1.10	70X70	60X60	FDP/FDM	Cu
SH-84WEBAXBPM	WR112	6.57-9.99	≤ 1.10	50X50	45X45	FBP/FBM	Cu
SH-84WHBAXBPM	WR112	6.57-9.99	≤ 1.10	70X70	50X50	FBP/FBM	Cu
SH-100WEBAXBPM	WR90	8.20-12.40	≤ 1.10	40X40	35X35	FBP/FBM	Cu
SH-100WHBAXBPM	WR90	8.20-12.40	≤ 1.10	50X50	40X40	FBP/FBM	Cu
SH-120WEBAXBPM	WR75	9.84-15.0	≤ 1.10	40X40	35X35	FBP/FBM	Cu
SH-120WHBAXBPM	WR75	9.84-15.0	≤ 1.10	40X40	40X40	FBP/FBM	Cu
SH-140WEBAXBPM	WR62	11.9-18.0	≤ 1.10	40X40	30X30	FBP/FBM	Cu
SH-140WHBAXBPM	WR62	11.9-18.0	≤ 1.10	40X40	35X35	FBP/FBM	Cu
SH-180WEBAXBPM	WR51	14.5-22.0	≤ 1.10	30X30	30X30	FBP/FBM	Cu
SH-180WHBAXBPM	WR51	14.5-22.0	≤ 1.10	30X30	35X35	FBP/FBM	Cu
SH-220WEBAXBPM	WR42	17.6-26.7	≤ 1.10	30X30	25X25	FBP/FBM	Cu
SH-220WHBAXBPM	WR42	17.6-26.7	≤ 1.10	30X30	30X30	FBP/FBM	Cu
SH-260WEBAXBPM	WR34	21.7-33.0	≤ 1.15	30X30	20X20	FBP/FBM	Cu
SH-260WHBAXBPM	WR34	21.7-33.0	≤ 1.15	30X30	25X25	FBP/FBM	Cu
SH-320WEBAXBPM	WR28	26.5-40.0	≤ 1.15	30X30	20X20	FBP/FBM	Cu
SH-320WHBAXBPM	WR28	26.5-40.0	≤ 1.15	30X30	20X20	FBP/FBM	Cu
SH-400WEBAXBPM	WR22	32.9-50.1	≤ 1.15	30X30	20X20	FUGP	Cu
SH-400WHBAXBPM	WR22	32.9-50.1	≤ 1.15	30X30	25X25	FUGP	Cu
SH-500WEBAXBPM	WR19	39.2-59.6	≤ 1.15	30X30	20X20	FUGP	Cu
SH-500WHBAXBPM	WR19	39.2-59.6	≤ 1.15	30X30	20X20	FUGP	Cu
SH-620WEBAXBPM	WR15	49.8-75.8	≤ 1.15	30X30	20X20	FUGP	Cu
SH-620WHBAXBPM	WR15	49.8-75.8	≤ 1.15	30X30	20X20	FUGP	Cu
SH-740WEBAXBPM	WR12	60.5-91.9	≤ 1.15	30X30	20X20	FUGP	Cu
SH-740WHBAXBPM	WR12	60.5-91.9	≤ 1.15	30X30	20X20	FUGP	Cu
SH-900WEBAXBPM	WR10	73.8-112	≤ 1.15	30X30	20X20	FUGP	Cu
SH-900WHBAXBPM	WR10	73.8-112	≤ 1.15	30X30	20X20	FUGP	Cu
SH-1200WEBAXBPM	WR8	92.2-140	-	20X20	-	FUGP	Cu
SH-1200WHBAXBPM	WR8	92.2-140	-	20X20	-	FUGP	Cu
SH-1400WEBAXBPM	WR7	113-173	-	20X20	-	FUGP	Cu
SH-1400WHBAXBPM	WR7	113-173	-	20X20	-	FUGP	Cu
SH-1800WEBAXBPM	WR5	145-220	-	20X20	-	FUGP	Cu
SH-1800WHBAXBPM	WR5	145-220	-	20X20	-	FUGP	Cu
SH-2200WEBAXBPM	WR4	172-261	-	20X20	-	FUGP	Cu
SH-2200WHBAXBPM	WR4	172-261	-	20X20	-	FUGP	Cu
SH-2600WEBAXBPM	WR3	217-330	-	20X20	-	FUGP	Cu
SH-2600WHBAXBPM	WR3	217-330	-	20X20	-	FUGP	Cu

WAVEGUIDE BEND

Waveguide Miter Bend

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type (EIA)	Freq Range (GHz)	Working Bandwidth	VSWR	Min Dimensions (AxB)mm	Flange	Material
SH-3WTEBAXBPM	WR2300	0.32-0.49	Full band	≤ 15%	220 X220	FDP/FDM	Al
SH-3WTHBAXBPM	WR2300	0.32-0.49	≤ 15%	≤ 15%	350 X350	FDP/FDM	Al
SH-4WTEBAXBPM	WR2100	0.35-0.53	Full band	≤ 15%	200 X200	FDP/FDM	Al
SH-4WTHBAXBPM	WR2100	0.35-0.53	≤ 15%	≤ 15%	330 X330	FDP/FDM	Al
SH-5WTEBAXBPM	WR1800	0.41-0.62	Full band	≤ 15%	180 X180	FDP/FDM	Al
SH-5WTHBAXBPM	WR1800	0.41-0.62	≤ 15%	≤ 15%	300 X300	FDP/FDM	Al
SH-6WTEBAXBPM	WR1500	0.49-0.75	Full band	≤ 15%	150 X150	FDP/FDM	Al
SH-6WTHBAXBPM	WR1500	0.49-0.75	≤ 15%	≤ 15%	240 X240	FDP/FDM	Al
SH-8WTEBAXBPM	WR1150	0.64-0.98	Full band	≤ 15%	130 X130	FDP/FDM	Al
SH-8WTHBAXBPM	WR1150	0.64-0.98	≤ 15%	≤ 15%	220 X220	FDP/FDM	Al
SH-9WTEBAXBPM	WR975	0.75-1.15	Full band	≤ 15%	120 X120	FDP/FDM	Al
SH-9WTHBAXBPM	WR975	0.75-1.15	≤ 15%	≤ 15%	200 X200	FDP/FDM	Al
SH-12WTEBAXBPM	WR770	0.96-1.46	Full band	≤ 15%	110 X110	FDP/FDM	Al
SH-12WTHBAXBPM	WR770	0.96-1.46	≤ 15%	≤ 15%	160 X160	FDP/FDM	Al
SH-14WTEBAXBPM	WR650	1.13-1.73	Full band	≤ 15%	100 X100	FDP/FDM	Al
SH-14WTHBAXBPM	WR650	1.13-1.73	≤ 15%	≤ 15%	140 X140	FDP/FDM	Al
SH-18WTEBAXBPM	WR510	1.45-2.20	Full band	≤ 15%	90 X90	FDP/FDM	Al
SH-18WTHBAXBPM	WR510	1.45-2.20	≤ 15%	≤ 15%	120 X120	FDP/FDM	Al
SH-22WTEBAXBPM	WR430	1.72-2.61	Full band	≤ 15%	70 X70	FDP/FDM	Al
SH-22WTHBAXBPM	WR430	1.72-2.61	≤ 15%	≤ 15%	100 X100	FDP/FDM	Al
SH-26WTEBAXBPM	WR340	2.17-3.30	Full band	≤ 15%	70 X70	FDP/FDM	Al
SH-26WTHBAXBPM	WR340	2.17-3.30	≤ 15%	≤ 15%	100 X100	FDP/FDM	Al
SH-32WTEBAXBPM	WR284	2.60-3.95	Full band	≤ 15%	60 X60	FDP/FDM	Al
SH-32WTHBAXBPM	WR284	2.60-3.95	≤ 15%	≤ 15%	65 X65	FDP/FDM	Al
SH-40WTEBAXBPM	WR229	3.22-4.90	Full band	≤ 15%	45 X45	FDP/FDM	Al
SH-40WTHBAXBPM	WR229	3.22-4.90	≤ 15%	≤ 15%	60 X60	FDP/FDM	Al
SH-48WTEBAXBPM	WR187	3.94-5.99	Full band	≤ 15%	45 X45	FDP/FDM	Al
SH-48WTHBAXBPM	WR187	3.94-5.99	≤ 15%	≤ 15%	60 X60	FDP/FDM	Al
SH-58WTEBAXBPM	WR159	4.64-7.05	Full band	≤ 15%	40 X40	FDP/FDM	Al
SH-58WTHBAXBPM	WR159	4.64-7.05	≤ 15%	≤ 15%	50 X50	FDP/FDM	Al
SH-70WTEBAXBPM	WR137	5.38-8.17	Full band	≤ 15%	35 X35	FDP/FDM	Cu
SH-70WTHBAXBPM	WR137	5.38-8.17	≤ 15%	≤ 15%	45 X45	FDP/FDM	Cu
SH-84WTEBAXBPM	WR112	6.57-9.99	Full band	≤ 15%	30 X30	FBP/FBM	Cu
SH-84WTHBAXBPM	WR112	6.57-9.99	≤ 15%	≤ 15%	40 X40	FBP/FBM	Cu
SH-100WTEBAXBPM	WR90	8.20-12.40	Full band	≤ 15%	25 X25	FBP/FBM	Cu
SH-100WTHBAXBPM	WR90	8.20-12.40	≤ 15%	≤ 15%	30 X30	FBP/FBM	Cu
SH-120WTEBAXBPM	WR75	9.84-15.0	Full band	≤ 15%	25 X25	FBP/FBM	Cu
SH-120WTHBAXBPM	WR75	9.84-15.0	≤ 15%	≤ 15%	30 X30	FBP/FBM	Cu
SH-140WTEBAXBPM	WR62	11.9-18.0	Full band	≤ 15%	20 X20	FBP/FBM	Cu
SH-140WTHBAXBPM	WR62	11.9-18.0	≤ 15%	≤ 15%	25 X25	FBP/FBM	Cu
SH-180WTEBAXBPM	WR51	14.5-22.0	Full band	≤ 15%	20 X20	FBP/FBM	Cu
SH-180WTHBAXBPM	WR51	14.5-22.0	≤ 15%	≤ 15%	25 X25	FBP/FBM	Cu
SH-220WTEBAXBPM	WR42	17.6-26.7	Full band	≤ 15%	15 X15	FBP/FBM	Cu
SH-220WTHBAXBPM	WR42	17.6-26.7	≤ 10%	≤ 15%	20 X20	FBP/FBM	Cu
SH-260WTEBAXBPM	WR34	21.7-33.0	Full band	≤ 15%	15 X15	FBP/FBM	Cu
SH-260WTHBAXBPM	WR34	21.7-33.0	≤ 10%	≤ 15%	20 X20	FDP/FDM	Cu
SH-320WTEBAXBPM	WR28	26.5-40.0	Full band	≤ 15%	12 X12	FDP/FDM	Cu
SH-320WTHBAXBPM	WR28	26.5-40.0	≤ 10%	≤ 15%	15 X15	FDP/FDM	Cu

WAVEGUIDE BEND

Dual Ridge Waveguide Bend

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type (EIA)	Freq Range (GHz)	VSWR	Min Dimensions (AxB)mm	Flange	Material
SH-84DRWEBAXBPM	WRD84	0.84-2	≤ 1.25	150X150	FP/FM	Al
SH-84DRWHBAXBPM	WRD84	0.84-2	≤ 1.25	200X200	FP/FM	Al
SH-150DRWEBAXBPM	WRD150	1.5-3.6	≤ 1.25	100X100	FP/FM	Al
SH-150DRWHBAXBPM	WRD150	1.5-3.6	≤ 1.25	150X150	FP/FM	Al
SH-200DRWEBAXBPM	WRD200	2-4.8	≤ 1.25	100X100	FP/FM	Al
SH-200DRWHBAXBPM	WRD200	2-4.8	≤ 1.25	150X150	FP/FM	Al
SH-250DRWEBAXBPM	WRD250	2.6-7.8	≤ 1.25	100X100	FP/FM	Al
SH-250DRWHBAXBPM	WRD250	2.6-7.8	≤ 1.25	150X150	FP/FM	Al
SH-350DRWEBAXBPM	WRD350	3.5-8.2	≤ 1.25	100X100	FP/FM	Al
SH-350DRWHBAXBPM	WRD350	3.5-8.2	≤ 1.25	100X100	FP/FM	Al
SH-475DRWEBAXBPM	WRD475	4.75-11	≤ 1.25	100X100	FP/FM	Cu
SH-475DRWHBAXBPM	WRD475	4.75-11	≤ 1.25	100X100	FP/FM	Cu
SH-500DRWEBAXBPM	WRD500	5-18	≤ 1.25	80X80	FP/FM	Cu
SH-500DRWHBAXBPM	WRD500	5-18	≤ 1.25	80X80	FP/FM	Cu
SH-580DRWEBAXBPM	WRD580	5.8-16	≤ 1.25	80X80	FP/FM	Cu
SH-580DRWHBAXBPM	WRD580	5.8-16	≤ 1.25	80X80	FP/FM	Cu
SH-650DRWEBAXBPM	WRD650	6.5-18	≤ 1.25	50X50	FP/FM	Cu
SH-650DRWHBAXBPM	WRD650	6.5-18	≤ 1.25	50X50	FP/FM	Cu
SH-750DRWEBAXBPM	WRD750	7.5-18	≤ 1.25	50X50	FP/FM	Cu
SH-750DRWHBAXBPM	WRD750	7.5-18	≤ 1.25	50X50	FP/FM	Cu
SH-700DRWEBAXBPM	WRD700	7-18.5	≤ 1.25	50X50	FP/FM	Cu
SH-700DRWHBAXBPM	WRD700	7-18.5	≤ 1.25	50X50	FP/FM	Cu
SH-1100DRWEBAXBPM	WRD110	11-26.5	≤ 1.25	30X30	FP/FM	Cu
SH-1100DRWHBAXBPM	WRD110	11-26.5	≤ 1.25	30X30	FP/FM	Cu
SH-1800DRWEBAXBPM	WRD180	18-40	≤ 1.3	30X30	FP/FM	Cu
SH-1800DRWHBAXBPM	WRD180	18-40	≤ 1.3	30X30	FP/FM	Cu

WAVEGUIDE BEND

Dual Ridge Twist Waveguide

ELECTRICAL CHARACTERISTICS:

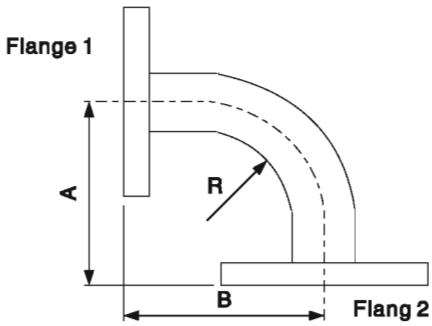
Part No.	WG Type (IEC)	Freq Range (GHz)	VSWR	Standard Length(mm)	Flange	Material
SH-84DRWTA..PM	WRD84	0.84-2	≤1.25	500	FP/FM	Al
SH-150DRWTA..PM	WRD150	1.5-3.6	≤1.25	400	FP/FM	Al
SH-200DRWTA...PM	WRD200	2-4.8	≤1.25	400	FP/FM	Al
SH-250DRWTA.PM	WRD250	2.6-7.8	≤1.25	300	FP/FM	Al
SH-350DRWTA.PM	WRD350	3.5-8.2	≤1.25	300	FP/FM	Al
SH-475DRWTA..PM	WRD475	4.75-11	≤1.25	300	FP/FM	Cu
SH-500DRWTA..PM	WRD500	5-18	≤1.25	200	FP/FM	Cu
SH-580DRWTA..PM	WRD580	5.8-16	≤1.25	200	FP/FM	Cu
SH-650DRWTAPM	WRD650	6.5-18	≤1.25	200	FP/FM	Cu
SH-750DRWTA..PM	WRD750	7.5-18	≤1.25	200	FP/FM	Cu
SH-700DRWTA..PM	WRD700	7-18.5	≤1.25	200	FP/FM	Cu
SH-1100DRWTA...PM	WRD110	11-26.5	≤1.25	150	FP/FM	Cu
SH-1800DRWTA...PM	WRD180	18-40	≤1.3	80	FP/FM	Cu

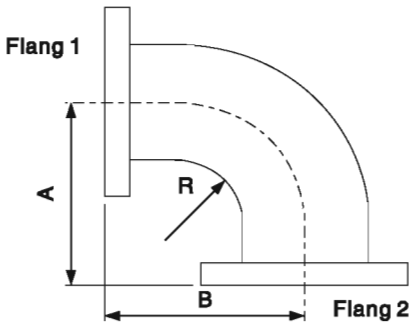
STRAIGHT WAVEGUIDE

Shinhom Microwave offers a standard product line of E-bends and H-bends covering waveguide sizes WR10 thru WR430. Multi-degrees, additional sizes, configurations and combinations are available on request.

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR (Max)	Std Dimensions AxBxR(mm)	WG type		Flange	Material
				IEC	EIA		
SH-22WEB...	1.72-2.61	1.15	190x190x95	R22	WR430	FDP/FDM	Al/Cu
SH-22WEB...	1.72-2.61	1.15	250x250x152	R22	WR430	FDP/FDM	Al/Cu
SH-26WEB...	2.17-3.30	1.15	100x100x40	R26	WR340	FDP/FDM	Al/Cu
SH-26WEB...	2.17-3.30	1.15	180x180x100	R26	WR340	FDP/FDM	Al/Cu
SH-32WEB...	2.60-3.95	1.10	100x100x40	R32	WR274	FDP/FDM	Al/Cu
SH-32WEB...	2.60-3.95	1.10	160x160x100	R32	WR284	FDP/FDM	Al/Cu
SH-40WEB...	3.22-4.90	1.10	80x80x40	R40	WR229	FDP/FDM	Al/Cu
SH-40WEB...	3.22-4.90	1.10	120x120x78	R40	WR229	FDP/FDM	Al/Cu
SH-48WEB...	3.94-5.99	1.10	80x80x40	R48	WR187	FDP/FDM	Al/Cu
SH-48WEB...	3.94-5.99	1.10	80x80x40	R48	WR187	FDP/FDM	Al/Cu
SH-58WEB...	4.64-7.05	1.10	80x80x40	R58	WR159	FDP/FDM	Al/Cu
SH-58WEB...	4.64-7.05	1.10	80x80x40	R58	WR159	FDP/FDM	Al/Cu
SH-70WEB...	5.38-8.17	1.10	60x60x30	R70	WR137	FDP/FDM	Al/Cu
SH-70WEB...	5.38-8.17	1.10	80x80x50	R70	WR137	FDP/FDM	Al/Cu
SH-84WEB...	6.57-9.99	1.10	50x50x25	R84	WR112	FBP/FBM/FBE	Al/Cu
SH-84WEB...	6.57-9.99	1.10	60x60x35	R84	WR112	FBP/FBM/FBE	Al/Cu
SH-100WEB...	8.20-12.40	1.10	40x40x20	R100	WR90	FBP/FBM/FBE	Al/Cu
SH-100WEB...	8.20-12.40	1.10	55x55x35	R100	WR90	FBP/FBM/FBE	Al/Cu
SH-120WEB...	9.84-15.0	1.10	40x40x20	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-120WEB...	9.84-15.0	1.10	45x45x30	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-140WEB...	11.9-18.0	1.10	40x40x20	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-140WEB...	11.9-18.0	1.10	40x40x25	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-180WEB...	14.5-22.0	1.10	30x30x15	R180	WR51	FBP/FBM/FBE	Al/Cu
SH-180WEB...	14.5-22.0	1.10	35x35x20	R180	WR51	FBP/FBM/FBE	Al/Cu
SH-220WEB...	17.6-26.7	1.15	30x30x15	R220	WR42	FBP/FBM/FBE	Al/Cu
SH-220WEB...	17.6-26.7	1.15	35x35x20	R220	WR42	FBP/FBM/FBE	Al/Cu
SH-260WEB...	21.7-33.0	1.15	30x30x15	R260	WR34	FBP/FBM/FBE	Al/Cu
SH-260WEB...	21.7-33.0	1.15	35x35x20	R260	WR34	FBP/FBM/FBE	Al/Cu
SH-320WEB...	26.3-40.0	1.15	25x25x10	R320	WR28	FBP/FBM/FBE	Al/Cu
SH-320WEB...	26.3-40.0	1.15	30x30x15	R320	WR28	FBP/FBM/FBE	Al/Cu
SH-400WEB...	32.9-50.1	1.20	25x25x10	R400	WR22	FUGP	Cu
SH-400WEB...	32.9-50.1	1.20	20x20x10	R400	WR22	FUGP	Cu
SH-500WEB...	39.2-59.6	1.20	25x25x10	R500	WR19	FUGP	Cu
SH-500WEB...	39.2-59.6	1.20	25x25x10	R500	WR19	FUGP	Cu
SH-620WEB...	49.8-75.8	1.20	20x20x10	R620	WR15	FUGP	Cu
SH-620WEB...	49.8-75.8	1.20	25x25x10	R620	WR15	FUGP	Cu
SH-740WEB...	60.5-91.9	1.20	20x20x10	R740	WR12	FUGP	Cu
SH-740WEB...	60.5-91.9	1.20	25x25x10	R740	WR12	FUGP	Cu
SH-900WEB...	73.8-100	1.20	20x20x10	R900	WR10	FUGP	Cu
SH-900WEB...	73.8-100	1.20	25x25x10	R900	WR10	FUGP	Cu





Ordering Information

Example Part No: SH – 100 WEB 40X40 P M A 45

- Shinhom Microwave
- WG type:R100
- Product Type: WEB: E–bend, WHB: H–bend
- Bend WG Dimensions: A x B = 40 x 40mm
- Flange 1 Type: P=FBP100
- Flange 2 Type: M=FBM100
- Material : A=Aluminum C=Copper
- Bending Angle: 45° (90° as default)

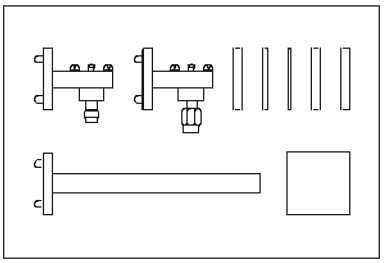
- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black/grey top coat
- Bends other than 90° available on request
- Mitered bends available on request

Waveguide Calibration Kits

Waveguide Calibration Kits

Part No.	Description	Parameter	Qty
1	Waveguide to Coaxial Adapter	Each of Male and Female Connector	2
2	Waveguide Matched Termination	VSWR≤1.03	1
3	Waveguide Short Plate	VSWR≥60	2
4	1/4 λ Precision Waveguide Section	L=1/4 λ	1
5	1/8 λ Precision Waveguide Section	L=1/8 λ	1
6	3/8 λ Precision Waveguide Section	L=3/8 λ	1
7	Packing Case of Aluminum	/	1
8	AlloyScrews	/	1 Set

Waveguide Calibration Kits

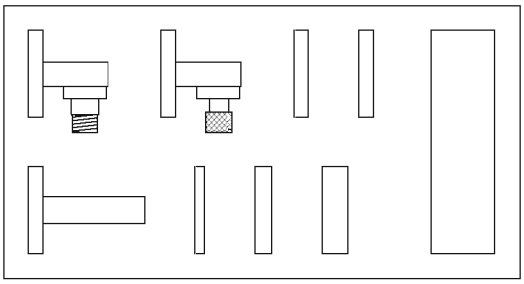


Double-Ridged
Waveguide Calibration Kits

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	WG Type EIA	Connector	Flange	Material	Finish
SH-84DRVNAWKN	0.84-2	WRD84	N Female	FP	Al	Chromate Conversion
SH-150DRVNAWKN	1.5-3.8	WRD150	N Female	FP	Al	Chromate Conversion
SH-200DRVNAWKN	2-4.8	WRD200	N Female	FP	Al	Chromate Conversion
SH-250DRVNAWKN	2.6-7.8	WRD250	N Female	FP	Al	Chromate Conversion
SH-350DRVNAWKN	3.5-8.2	WRD350	N Female	FP	Al	Chromate Conversion
SH-475DRVNAWKN	4.75-11	WRD475	N Female	FP	Cu	Silver Plating
SH-500DRVNAWKS	5-18	WRD500	SMA Female	FP	Cu	Silver Plating
SH-580DRVNAWKS	5.8-16	WRD580	SMA Female	FP	Cu	Silver Plating
SH-650DRVNAWKS	6.5-18	WRD650	SMA Female	FP	Cu	Silver Plating
SH-750DRVNAWKS	7.5-18	WRD750	SMA Female	FP	Cu	Silver Plating
SH-700DRVNAWKS	7-18.5	WRD700	SMA Female	FP	Cu	Silver Plating
SH-1100DRVNAWKK	11-26.5	WRD1100	2.92 Female	FP	Cu	Silver Plating
SH-1800DRVNAWKK	18-40	WRD1800	2.92 Female	FP	Cu	Silver Plating

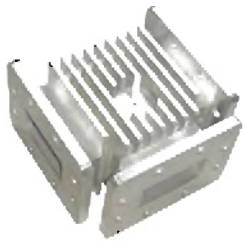
Waveguide Calibration Kits



ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Connector	Flange	Material
SH-9VNAWKN	WR975	0.75-1.15	N Female	FDP	Al
SH-12VNAWKN	WR770	0.96-1.46	N Female	FDP	Al
SH-14VNAWKN	WR650	1.13-1.73	N Female	FDP	Al
SH-18VNAWKN	WR510	1.45-2.20	N Female	FDP	Al
SH-22VNAWKN	WR430	1.72-2.61	N Female	FDP	Al
SH-26VNAWKN	WR340	2.17-3.30	N Female	FDP	Al
SH-32VNAWKN	WR284	2.60-3.95	N Female	FDP	Al
SH-40VNAWKN	WR229	3.22-4.90	N Female	FDP	Al
SH-48VNAWKN	WR187	3.94-5.99	N Female	FDP	Al
SH-58VNAWKN	WR159	4.64-7.05	N Female	FDP	Al
SH-70VNAWKN	WR137	5.38-8.17	N Female	FDP	Cu
SH-84VNAWKN	WR112	6.57-9.99	N Female	FBP	Cu
SH-100VNAWKN	WR90	8.20-12.4	N Female	FBP	Cu
SH-120VNAWKN	WR75	9.84-15.0	N Female	FBP	Cu
SH-140VNAWKS	WR62	11.9-18.0	SMA Female	FBP	Cu
SH-180VNAWKS	WR51	14.5-22.0	SMA Female	FBP	Cu
SH-220VNAWKK	WR42	17.6-26.7	2.92 Female	FBP	Cu
SH-260VNAWKK	WR34	21.7-33.0	2.92 Female	FBP	Cu
SH-320VNAWKK	WR28	26.5-40.0	2.92 Female	FBP	Cu
SH-400VNAWKV	WR22	32.9-50.1	2.4 Female	FUGP	Cu
SH-500VNAWK1.85	WR19	39.2-59.6	2.4 Female	FUGP	Cu
SH-620VNAWK1.85	WR15	49.8-75.8	1.85 Female	FUGP	Cu
SH-740VNAWK1.0	WR12	60.5-91.9	1.0 Female	FUGP	Cu
SH-900VNAWK1.0	WR10	73.8-112	1.0 Female	FUGP	Cu

Waveguide Circulator

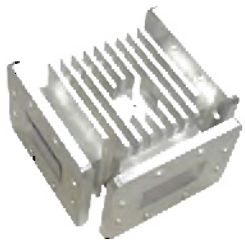


Waveguide Circulator

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR	IL(dB)	Isolation (dB)	Flange	Material
SH-14WCIC...	WR650	1.13-1.73	≤5%	≤1.2	≤0.3	≥20	FDP	Al
SH-18WCIC...	WR510	1.45-2.20	≤5%	≤1.2	≤0.3	≥20	FDP	Al
SH-22WCIC...	WR430	1.72-2.61	≤5%	≤1.2	≤0.3	≥20	FDP	Al
SH-26WCIC...	WR340	2.17-3.30	≤5%	≤1.2	≤0.3	≥20	FDP	Al
SH-32WCIC...	WR284	2.60-3.95	≤5%	≤1.2	≤0.3	≥20	FDP	Al
SH-40WCIC...	WR229	3.22-4.90	≤10%	≤1.2	≤0.3	≥20	FDP	Al
SH-48WCIC...	WR187	3.94-5.99	≤10%	≤1.2	≤0.3	≥20	FDP	Al
SH-58WCIC...	WR159	4.64-7.05	≤10%	≤1.2	≤0.3	≥20	FDP	Al
SH-70WCIC...	WR137	5.38-8.17	≤10%	≤1.2	≤0.3	≥20	FDP	Al
SH-84WCIC...	WR112	6.57-9.99	≤15%	≤1.2	≤0.3	≥20	FBP	Al
SH-100WCIC...	WR90	8.20-12.40	≤15%	≤1.2	≤0.3	≥20	FBP	Al
SH-120WCIC...	WR75	9.84-15.0	≤15%	≤1.2	≤0.3	≥20	FBP	Al
SH-140WCIC...	WR62	11.9-18.0	≤15%	≤1.2	≤0.3	≥20	FBP	Al
SH-180WCIC...	WR51	14.5-22.0	≤15%	≤1.25	≤0.3	≥20	FBP	Al
SH-220WCIC...	WR42	17.6-26.7	≤15%	≤1.25	≤0.3	≥20	FBP	Cu
SH-260WCIC...	WR34	21.7-33.0	≤15%	≤1.25	≤0.3	≥20	FBP	Cu
SH-320WCIC...	WR28	26.5-40.0	≤15%	≤1.25	≤0.4	≥20	FBP	Cu
SH-400WCIC...	WR22	32.9-50.1	≤5%	≤1.35	≤0.6	≥17	FUGP	Cu
SH-500WCIC...	WR19	39.2-59.6	≤5%	≤1.50	≤0.6	≥15	FUGP	Cu
SH-620WCIC...	WR15	49.8-75.8	≤5%	≤1.50	≤0.6	≥15	FUGP	Cu
SH-740WCIC...	WR12	60.5-91.9	≤5%	≤1.50	≤0.8	≥15	FUGP	Cu
SH-900WCIC...	Wr10	73.8-112	≤5%	≤1.50	≤1.0	≥15	FUGP	Cu

Waveguide Circulator



High Power Waveguide Circulator

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR	IL(dB)	Isolation (dB)	Avg Power (W)	Flange	Material
SH-14WHPCIC20K	WR650	1.13-1.73	≤5%	≤1.2	≤0.3	≥20	20k	FDP	Al
SH-18WHPCIC1000	WR510	1.45-2.20	≤5%	≤1.2	≤0.3	≥20	1000	FDP	Al
SH-22WHPCIC1000	WR430	2.2-2.55	≤5%	≤1.2	≤0.3	≥20	1000	FDP	Al
SH-26WHPCIC1000	WR340	2.17-3.3	≤5%	≤1.2	≤0.3	≥20	1000	FDP	Al
SH-32WHPCIC1000	WR284	2.60-3.95	≤5%	≤1.2	≤0.3	≥20	1000	FDP	Al
SH-48WHPCIC1000	WR187	3.94-5.99	≤10%	≤1.2	≤0.3	≥20	1000	FDP	Al
SH-58WHPCIC1000	WR159	4.64-7.05	≤10%	≤1.2	≤0.3	≥20	1000	FDP	Al
SH-70WHPCIC400	WR137	5.38-8.17	≤10%	≤1.2	≤0.3	≥20	400	FDP	Al
SH-84WHPCIC400	WR112	6.57-9.99	≤10%	≤1.2	≤0.3	≥20	400	FBP	Al
SH-100WHPCIC300	WR90	8.2-12.4	≤15%	≤1.2	≤0.3	≥20	300	FBP	Al
SH-120WHPCIC100	WR75	9.84-15.0	≤15%	≤1.2	≤0.3	≥20	100	FBP	Al
SH-140WHPCIC150	WR62	11.9-18.0	≤15%	≤1.2	≤0.3	≥20	150	FBP	Al
SH-180WHPCIC100	WR51	14.5-22.0	≤15%	≤1.25	≤0.3	≥20	100	FBP	Al
SH-220WHPCIC80	WR42	17.6-26.7	≤15%	≤1.25	≤0.3	≥20	80	FBP	Cu
SH-260WHPCIC40	WR34	21.7-33.0	≤15%	≤1.25	≤0.3	≥20	80	FBP	Cu
SH-320WHPCIC40	WR28	26.5-40	≤15%	≤1.25	≤0.3	≥20	50	FBP	Cu
SH-400WHPCIC3	WR22	32.9-50.1	≤5%	≤1.25	≤0.5	≥20	3	FUGP	Cu

Waveguide Circulator

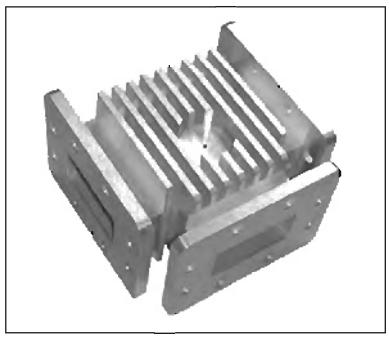
High Power Waveguide

Differential Phase Shift Circulator

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR	IL(dB)	Isolation (dB)	Avg Power(W)	Material
SH-14WHPDPSI40KW	WR650	1.13-1.73	≤5%	≤1.2	≤0.3	≥20	40k	Al
SH-18WHPDPSI30KW	WR510	1.45-2.20	≤5%	≤1.2	≤0.3	≥20	30k	Al
SH-22WHPDPS20KW	WR430	1.72-2.61	≤5%	≤1.2	≤0.3	≥20	20k	Al
SH-26WHPDPSI20KW	WR340	2.17-3.30	≤5%	≤1.2	≤0.3	≥20	20k	Al
SH-32WHPDPSI10KW	WR284	2.60-3.95	≤5%	≤1.2	≤0.4	≥20	10k	Al
SH-40WHPDPSI5KW	WR187	3.22-4.90	≤5%	≤1.2	≤0.4	≥20	5k	Al
SH-48WHPDPSI8KW	WR159	3.94-5.99	≤5%	≤1.2	≤0.4	≥20	8k	Al
SH-84WHPDPSI1200W	WR112	6.57-9.99	≤7%	≤1.25	≤0.4	≥20	1.2k	Cu
SH-100WHPDPSI1000W	WR90	8.2-12.5	≤7%	≤1.25	≤0.5	≥20	1k	Cu
SH-120WHPDPIC1000W	WR75	9.84-15.0	≤7%	≤1.25	≤0.5	≥20	1k	Cu
SH-140WHPDPSI800W	WR62	11.9-18.0	≤7%	≤1.25	≤0.5	≥20	800	Cu
SH-180WHPDPSI800W	WR51	14.5-22.0	≤7%	≤1.25	≤0.5	≥20	800	Cu

WAVEGUIDE CIRCULATOR



Shinhom Microwave offers a standard product line of waveguide circulators ranging from WR10 to WR 137. For more information feel free to call us and discuss your needs with one of our sales engineers.

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Operating Bandwidth (MHz)	VSWR (Max)	IL (dB) (Max)	Isolation (dB) (Min)	WG Type		Flange	Material
						IEC	EIA		
SH-70WCIC	5.38-8.17	700	1.20	0.3	20	R70	WR137	FDP/FDM	Al/Cu
SH-84WCIC	6.57-9.99	700	1.20	0.3	20	R84	WR112	FBP/FBM/FBE	Al/Cu
SH-100WCIC	8.20-12.40	800	1.20	0.3	20	R100	WR90	FBP/FBM/FBE	Al/Cu
SH-120WCIC	9.84-15.0	1000	1.20	0.3	20	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-140WCIC	11.9-18.0	1000	1.20	0.3	20	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-180WCIC	14.5-22.0	1000	1.20	0.3	20	R180	WR51	FBP/FBM/FBE	Al/Cu
SH-220WCIC	17.6-26.7	2000	1.20	0.3	20	R220	WR42	FBP/FBM/FBE	Al/Cu
SH-260WCIC	21.7-33.0	2000	1.20	0.3	20	R260	WR34	FBP/FBM/FBE	Al/Cu
SH-320WCIC	26.3-40.0	2000	1.20	0.3	20	R320	WR28	FBP/FBM/FBE	Al/Cu
SH-400WCIC	32.9-50.1	2000	1.30	0.6	20	R400	WR22	FUGP	Cu
SH-500WCIC	39.2-59.6	2000	1.30	0.6	20	R500	WR19	FUGP	Cu
SH-620WCIC	49.8-75.8	2000	1.30	0.6	20	R620	WR15	FUGP	Cu
SH-740WCIC	60.5-91.9	2000	1.30	0.8	20	R740	WR12	FUGP	Cu
SH-900WCIC	73.8-112	2000	1.30	1.0	20	R900	WR10	FUGP	Cu

Ordering Information

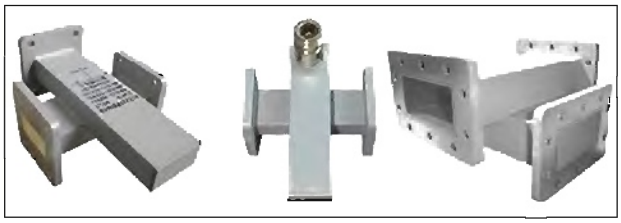
Example Part No: SH – 100 WCIC

- SH: Shinhom Microwave
- 100: WG type:R100
- WCIC: Product Type:WG Circulator

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black/grey top coat

CROSSGUIDE DIRECTIONAL COUPLER

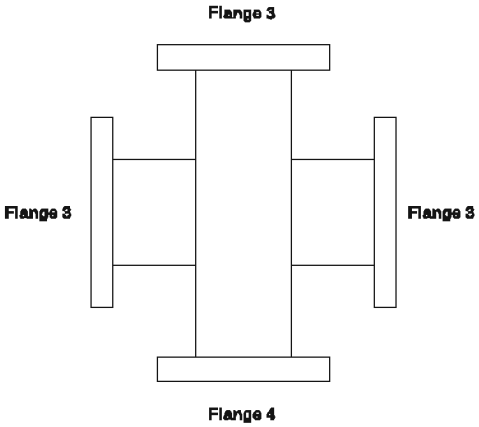
Shinhom Microwave manufactures Crossguide Directional Couplers covering a wide frequency range. Couplers are available in 3 or 4 port configuration. Standard coupling values are 20, 30, 40, 50 and 60 dB, with minimum Directivity of 18 dB. The compactness of crossguide coupler suits many applications where space is at a premium and directivity is not the prime consideration. Models are available with combinations of waveguide and coaxial ports. Special multi-port crossguide couplers can be manufactured to suit customer' s special requirements.



ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Operating Bandwidth (%)	VSWR(Max)		Coupling (dB)	Directivity Min(dB)	WG Type		Flange	Material
			Main Line	Secondary Line			IEC	EIA		
SH-22W+C...	1.72-2.61	10-20	1.10	1.15	18-60	18	R22	WR430	FDP/FDM	Al/Cu
SH-26W+C...	2.17-3.30	10-20	1.10	1.15	18-60	18	R26	WR340	FDP/FDM	Al/Cu
SH-32W+C...	2.60-3.95	10-20	1.10	1.15	18-60	18	R32	WR284	FDP/FDM	Al/Cu
SH-40W+C...	3.22-4.90	10-20	1.10	1.15	18-60	18	R40	WR229	FDP/FDM	Al/Cu
SH-48W+C...	3.94-5.99	10-20	1.10	1.15	18-60	18	R48	WR187	FDP/FDM	Al/Cu
SH-58W+C...	4.64-7.05	10-20	1.10	1.15	18-60	18	R58	WR159	FDP/FDM	Al/Cu
SH-70W+C...	5.38-8.17	10-20	1.10	1.15	18-60	18	R70	WR137	FDP/FDM	Al/Cu
SH-84W+C...	6.57-9.99	10-20	1.10	1.15	18-60	18	R84	WR112	FBP/FBM/FBE	Al/Cu
SH-100W+C...	8.20-12.40	10-20	1.10	1.15	18-60	18	R100	WR90	FBP/FBM/FBE	Al/Cu
SH-120W+C...	9.84-15.0	10-20	1.10	1.15	18-60	18	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-140W+C...	11.9-18.0	10-20	1.10	1.15	18-60	18	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-180W+C...	14.5-22.0	10-20	1.10	1.15	18-60	18	R180	WR51	FBP/FBM/FBE	Al/Cu
SH-220W+C...	17.6-26.7	10-20	1.10	1.15	18-60	18	R220	WR42	FBP/FBM/FBE	Al/Cu
SH-260W+C...	21.7-33.0	10-20	1.10	1.15	18-60	18	R260	WR34	FBP/FBM/FBE	Al/Cu
SH-320W+C...	26.3-40.0	10-20	1.15	1.15	18-60	18	R320	WR28	FBP/FBM/FBE	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.
**Typical operating bandwidth of the crossguide coupler is up to 20% of waveguide bandwidth.
***Nominal Accuracy: ± 0.7dB
Frequency Sensitivity: ± 1dB



Ordering Information

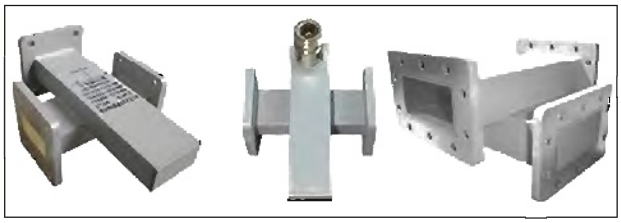
Example Part No: SH – 100 W+C 30 P M E M A

- SH – Shinhom Microwave
- 100 W – WG type: R100
- C – Product Type: Crossguide Directional Coupler (4 W G Ports)
- 30 – Coupling: C=30dB
- P – Flange 1 Type: FBP100
- M – Flange 2 Type: FBM100
- E – Flange 3 Type: FBE100
- M – Flange 4 Type: FBM100
- A – Material : A=Aluminum C=Copper

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

CROSSGUIDE DIRECTIONAL COUPLER

Shinhom Microwave manufactures Crossguide Directional Couplers covering a wide frequency range. Couplers are available in 3 or 4 port configuration. Standard coupling values are 20, 30, 40, 50 and 60 dB, with minimum Directivity of 18 dB. The compactness of crossguide coupler suits many applications where space is at a premium and directivity is not the prime consideration. Models are available with combinations of waveguide and coaxial ports. Special multi–port crossguide couplers can be manufactured to suit customer' s special requirements.

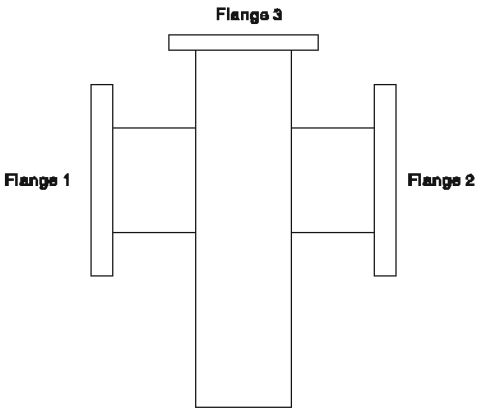


Style 2 – 3 Waveguide Ports

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Operating Bandwidth (%)	VSWR(Max)		Coupling (dB)	Directivity Min(dB)	WG Type		Flange	Material
			Main Line	Secondary Line			IEC	EIA		
SH–22WL+C...	1.72–2.61	10–20	1.10	1.15	16–60	18	R22	WR430	FDP/DFM	Al/Cu
SH–26WL+C...	2.17–3.30	10–20	1.10	1.15	16–60	18	R26	WR340	FDP/DFM	Al/Cu
SH–32WL+C...	2.60–3.95	10–20	1.10	1.15	16–60	18	R32	WR284	FDP/DFM	Al/Cu
SH–40WL+C...	3.22–4.90	10–20	1.10	1.15	16–60	18	R40	WR229	FDP/DFM	Al/Cu
SH–48WL+C...	3.94–5.99	10–20	1.10	1.15	16–60	18	R48	WR187	FDP/DFM	Al/Cu
SH–58WL+C...	4.64–7.05	10–20	1.10	1.15	16–60	18	R58	WR159	FDP/DFM	Al/Cu
SH–70WL+C...	5.38–8.17	10–20	1.10	1.15	16–60	18	R70	WR137	FDP/DFM	Al/Cu
SH–84WL+C...	6.57–9.99	10–20	1.10	1.15	16–60	18	R84	WR112	FBP/FBM/FBE	Al/Cu
SH–100WL+C...	8.20–12.4	10–20	1.10	1.15	16–60	18	R100	WR90	FBP/FBM/FBE	Al/Cu
SH–120WL+C...	9.84–15.0	10–20	1.10	1.15	16–60	18	R120	WR75	FBP/FBM/FBE	Al/Cu
SH–140WL+C...	11.9–18.0	10–20	1.10	1.15	16–60	18	R140	WR62	FBP/FBM/FBE	Al/Cu
SH–180WL+C...	14.5–22.0	10–20	1.10	1.15	16–60	18	R180	WR51	FBP/FBM/FBE	Al/Cu
SH–220WL+C...	17.6–26.7	10–20	1.10	1.15	16–60	18	R220	WR42	FBP/FBM/FBE	Al/Cu
SH–260WL+C...	21.7–33.0	10–20	1.10	1.15	16–60	18	R260	WR34	FBP/FBM/FBE	Al/Cu
SH–320WL+C...	26.3–40.0	10–20	1.15	1.15	16–60	18	R320	WR28	FBP/FBM/FBE	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.
**Typical operating bandwidth of the crossguide coupler is up to 20% of waveguide bandwidth.
***Nominal Accuracy: ± 0.7dB
Frequency Sensitivity: ± 1dB



Ordering Information

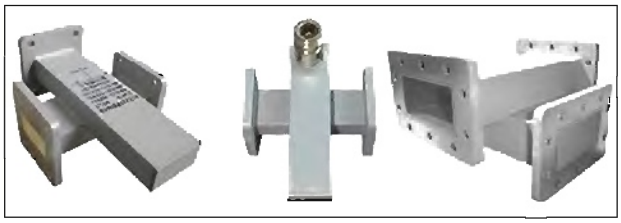
Example Part No: SH – 100 WL+C 30 P M E A

- Shinhom Microwave
- WG type: R100
- Product Type: Crossguide Directional Coupler (3 W G Ports)
- Coupling:C=30dB
- Flange 1 Type: FBP100
- Flange 2 Type: FBM100
- Flange 3 Type: FBE100
- Material : A=Aluminum C=Copper

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

CROSSGUIDE DIRECTIONAL COUPLER

Shinhom Microwave manufactures Crossguide Directional Couplers covering a wide frequency range. Couplers are available in 3 or 4 port configuration. Standard coupling values are 20, 30, 40, 50 and 60 dB, with minimum Directivity of 18 dB. The compactness of crossguide coupler suits many applications where space is at a premium and directivity is not the prime consideration. Models are available with combinations of waveguide and coaxial ports. Special multi–port crossguide couplers can be manufactured to suit customer's special requirements.

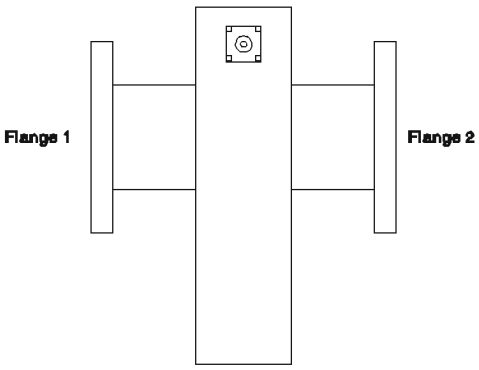


Style 3 - 2 Waveguide Ports, 1 Coax Port

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Operating Bandwidth (%)	VSWR(Max)		Coupling (dB)	Directivity Min(dB)	WG Type		Flange	Coax Con	Material
			Main Line	Secondary Line			IEC	EIA			
SH–22WL+C...	1.72–2.61	10–20	1.10	1.25	18–60	18	R22	WR430	FDP/DFM	N	Al/Cu
SH–26WL+C...	2.17–3.30	10–20	1.10	1.25	18–60	18	R26	WR340	FDP/DFM	N	Al/Cu
SH–32WL+C...	2.60–3.95	10–20	1.10	1.25	18–60	18	R32	WR284	FDP/DFM	N	Al/Cu
SH–40WL+C...	3.22–4.90	10–20	1.10	1.25	18–60	18	R40	WR229	FDP/DFM	N	Al/Cu
SH–48WL+C...	3.94–5.99	10–20	1.10	1.25	18–60	18	R48	WR187	FDP/DFM	N	Al/Cu
SH–58WL+C...	4.64–7.05	10–20	1.10	1.25	18–60	18	R58	WR159	FDP/DFM	N	Al/Cu
SH–70WL+C...	5.38–8.17	10–20	1.10	1.25	18–60	18	R70	WR137	FDP/DFM	N	Al/Cu
SH–84WL+C...	6.57–9.99	10–20	1.10	1.25	18–60	18	R84	WR112	FBP/FBM/FBE	N	Al/Cu
SH–100WL+C...	8.20–12.4	10–20	1.10	1.25	18–60	18	R100	WR90	FBP/FBM/FBE	N	Al/Cu
SH–120WL+C...	9.84–15.0	10–20	1.10	1.25	18–60	18	R120	WR75	FBP/FBM/FBE	SMA	Al/Cu
SH–140WL+C...	11.9–18.0	10–20	1.10	1.25	18–60	18	R140	WR62	FBP/FBM/FBE	SMA	Al/Cu
SH–180WL+C...	14.5–22.0	10–20	1.10	1.30	18–60	18	R180	WR51	FBP/FBM/FBE	SMA	Al/Cu
SH–220WL+C...	17.6–26.7	10–20	1.10	1.50	18–60	18	R220	WR42	FBP/FBM/FBE	SMA	Al/Cu
SH–320WL+C...	26.3–40.0	10–20	1.15	1.50	18–60	18	R320	WR28	FBP/FBM/FBE	SMA	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.
**Typical operating bandwidth of the crossguide coupler is up to 20% of waveguide bandwidth.
***Nominal Accuracy: ± 0.7dB
Frequency Sensitivity: ± 1dB



Ordering Information

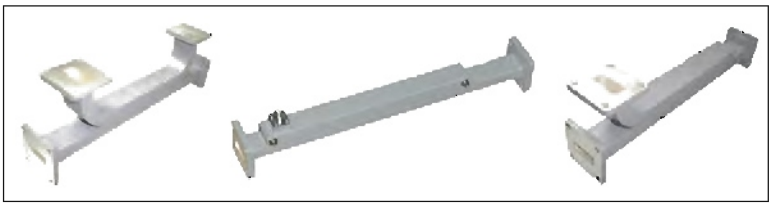
Example Part No: SH – 100 WL+C 30 N K P M A

- SH: Shinhom Microwave
- 100: WG type: R100
- WL+C: Product Type: Crossguide Directional Coupler (2 W G Ports,1 Coa x port)
- 30: Coupling:C=30dB
- N: Coax Connector Type:N=Type N,S=SMA, 2.92=K2.92mm,2.4=2.4mm,TNC=TNC
- K: J=Male,K=Female
- P: Flange 1 Type: FBP100
- M: Flange 2 Type: FBM100
- A: Material : A=Aluminum C=Copper

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

BROADWALL DIRECTIONAL COUPLER

Shinhom Microwave manufactures a standard product lineof multi-hole broadwall directional couplers covering a wide frequency range. The optimum electrical characteristics of high directivity and coupling flatness are achieved utilizing a precision machined Tchebyscheff coupling hole distribution and a precision ground tapered load element in the secondary arm. Directional couplers are typically used for power sampling,frequency monitoring, especially in the test setups where power reflection measurements are required. Additional sizes and special configurations are available on request.

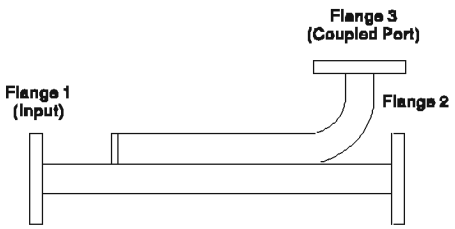


STYLE 1 - 3 WAVEGUIDE PORTS

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR(Max)		Coupling (dB)	Directivity Min(dB)	WG Type		Flange	Material
		Main Line	Secondary Line			IEC	EIA		
SH-14WC...	1.13-1.73	1.10	1.15	3-40	20-38	R14	WR650	FDP/FDM	Al/Cu
SH-18WC...	1.45-2.20	1.10	1.15	3-40	20-38	R18	WR510	FDP/FDM	Al/Cu
SH-22WC...	1.72-2.61	1.10	1.15	3-40	20-38	R22	WR430	FDP/FDM	Al/Cu
SH-26WC...	2.17-3.30	1.10	1.15	3-40	20-38	R26	WR340	FDP/FDM	Al/Cu
SH-32WC...	2.60-3.95	1.10	1.15	3-40	20-38	R32	WR284	FDP/FDM	Al/Cu
SH-40WC...	3.22-4.90	1.08	1.12	3-40	20-38	R40	WR229	FDP/FDM	Al/Cu
SH-48WC...	3.94-5.99	1.08	1.12	3-40	20-38	R48	WR187	FDP/FDM	Al/Cu
SH-58WC...	4.64-7.05	1.08	1.12	3-40	20-38	R58	WR159	FDP/FDM	Al/Cu
SH-70WC...	5.38-8.17	1.08	1.12	3-40	20-38	R70	WR137	FDP/FDM	Al/Cu
SH-84WC...	6.57-9.99	1.08	1.12	3-40	20-38	R84	WR112	FBP/FBM/FBE	Al/Cu
SH-100WC...	8.20-12.40	1.08	1.12	3-40	20-38	R100	WR90	FBP/FBM/FBE	Al/Cu
SH-120WC...	9.84-15.0	1.08	1.12	3-40	20-38	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-140WC...	11.9-18.0	1.10	1.15	3-40	20-38	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-180WC...	14.5-22.0	1.10	1.15	3-40	20-38	R180	WR51	FBP/FBM/FBE	Al/Cu
SH-220WC...	17.6-26.7	1.10	1.15	3-40	20-38	R220	WR42	FBP/FBM/FBE	Al/Cu
SH-260WC...	21.7-33.0	1.10	1.15	3-40	20-38	R260	WR34	FBP/FBM/FBE	Al/Cu
SH-320WC...	26.3-40.0	1.10	1.15	3-40	20-38	R320	WR28	FBP/FBM/FBE	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.
**Nominal Accuracy: ± 0.7dB
Frequency Sensitivity: ± 1dB



Ordering Information

Example Part No: SH - 100 W C 30 P M E A

- Shinhom Microwave
- WG type: R100
- Product Type: Broadwall Directional Coupler
- Coupling: C=30dB
- Flange 1 Type: FBP100
- Flange 2 Type: FBM100
- Flange 3 Type: FBE100
- Material : A=Aluminum, C=Copper

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

High Power Dual Directional Couplers

HDDC Series

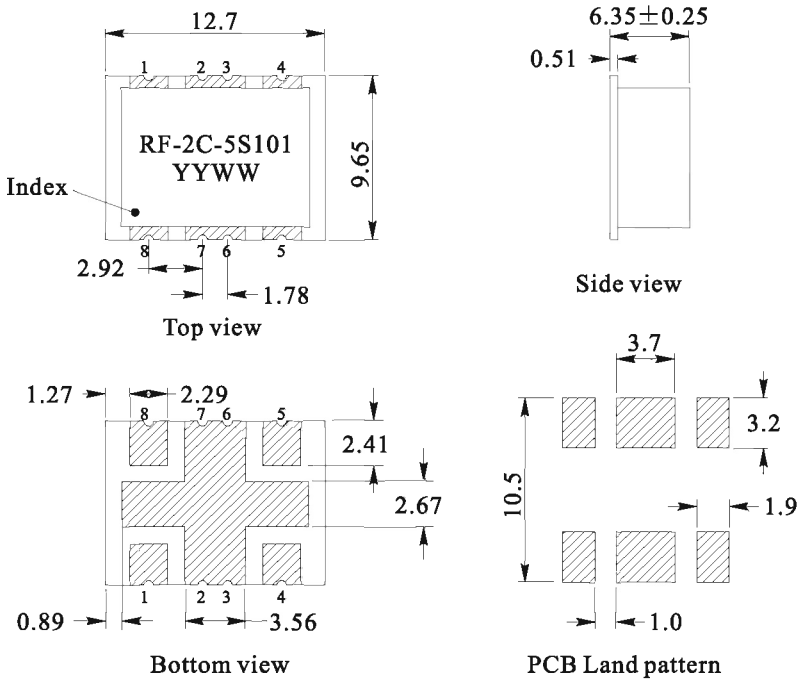
Shinhom's wideband high-power dual-directional coupler, with frequency coverage of 9kHz to 18GHz and power up to 5000W, is widely used in amplifiers, broadcasting, laboratory testing and communications.

Part No.	Frequency	Power	Coupling	Insertion loss	Directional	Standing wave
	(GHz)	(W)	(dB)	(dB,max.)	(dB,min.)	(max.)
HDDC-0.5-32-5K-40-N7	500KHz~0.032	5000	40 ± 1	0.15	18	1.2
HDDC-10-170-5K-60-S7	0.01~0.17	5000	60 ± 1.5	0.2	16	1.2
HDDC-1-50-3K-58-NS	0.001~0.05	3000	58 ± 8	0.1	20	1.1
HDDC-1.6-30-2K5-50-N	0.0016~0.03	2500	50 ± 0.5	0.05	-	1.15
HDDC-2-30-2K-50-NS	0.002~0.03	2000	50 ± 1.5	0.3	18	1.2
HDDC-30-80-2K-60-NS	0.03~0.08	2000	60 ± 1	0.2	20	1.1
HDDC-80-1000-2K-40-7S	0.08~1	2000	40 ± 1.5	0.25	20	1.2
HDDC-80-1000-2K-50-7S	0.08~1	2000	50 ± 1	0.3	20	1.3
HDDC-80-1000-2K-60-7S	0.08~1	2000	60 ± 1.5	0.25	20	1.2
HDDC-30-80-1K5-50-NS	0.03~0.08	1500	50 ± 1	0.4	20	1.1
HDDC-80-1000-1K5-50-NS	0.08~1	1500	50 ± 1	0.3	20	1.15
HDDC-9K-260-1K-40-NS	9KHz~0.26	1000	40 ± 1.5	0.4	10	1.25
HDDC-0.25-300-1K-50-NS	250KHz~0.3	1000	50 ± 2	0.5	16	1.2
HDDC-0.25-300-1K-50-N	250KHz~0.3	1000	50 ± 2	0.5	16	1.2
HDDC-2-32-1K-40-NS	0.002~0.032	1000	40 ± 1	0.5	20	1.2
HDDC-2-32-1K-50-NS	0.002~0.032	1000	50 ± 1.5	0.3	20	1.2
HDDC-25-1000-1K-50-NS	0.025~1	1000	50 ± 1.5	0.5	15	1.2
HDDC-80-1000-1K-50-NS	0.08~1	1000	50 ± 1	0.3	20	1.3
HDDC-200-400-1K-40-NS	0.2~0.4	1000	40 ± 1	0.2	20	1.15
HDDC-300-2000-1K-50-N	0.3~2	1000	50 ± 2	0.5	16	1.15
HDDC-1270-1305-1K-30-7-1	1.27~1.305	1000	30 ± 1	0.15	30	1.15
HDDC-500-2000-K8-50-NS	0.5~2	800	50 ± 0.8	0.3	18	1.35
HDDC-600-2700-K8-50-NS	0.6~2.7	800	50 ± 1.2	0.3	20	1.3
HDDC-300-6000-K6-30-NS	0.3~6	600	30 ± 0.9	0.7	15	1.4
HDDC-300-6000-K6-40-NS	0.3~6	600	40 ± 1.0	0.7	15	1.4
HDDC-400-6000-K6-30-NS	0.4~6	600	30 ± 0.8	0.6	15	1.3
HDDC-400-6000-K6-40-NS	0.4~6	600	40 ± 0.9	0.6	15	1.3
HDDC-400-8000-K6-30-NS	0.4~8	600	30 ± 0.9	0.7	14	1.4
HDDC-400-8000-K6-40-NS	0.4~8	600	40 ± 1.0	0.7	14	1.4
HDDC-500-6000-K6-30-NS	0.5~6	600	30 ± 0.7	0.6	15	1.3

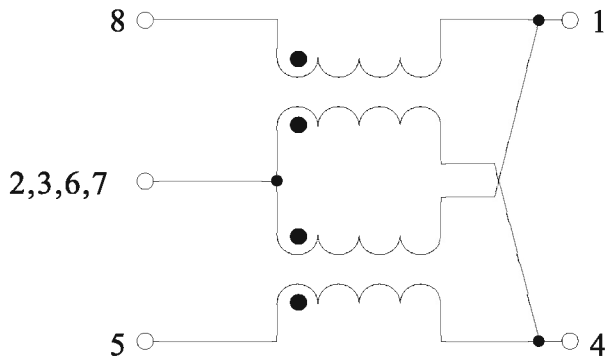
Part No.	Frequency	Power	Coupling	Insertion loss	Directional	Standing wave
	(GHz)	(W)	(dB)	(dB,max.)	(dB,min.)	(max.)
HDDC-500-6000-K6-40-NS	0.5~6	600	40 ± 0.8	0.6	15	1.3
HDDC-500-8000-K6-30-NS	0.5~8	600	30 ± 0.8	0.7	14	1.4
HDDC-500-8000-K6-40-NS	0.5~8	600	40 ± 0.9	0.7	14	1.4
HDDC-700-6000-K6-30-NS	0.7~6	600	30 ± 0.7	0.5	15	1.3
HDDC-700-6000-K6-40-NS	0.7~6	600	40 ± 0.7	0.5	15	1.3
HDDC-1000-6000-K6-30-NS	1~6	600	30 ± 0.7	0.5	15	1.3
HDDC-1000-6000-K6-40-NS	1~6	600	40 ± 0.7	0.5	15	1.3
HDDC-2000-6000-K6-30-NS	2~6	600	30 ± 0.7	0.4	15	1.3
HDDC-2000-6000-K6-40-NS	2~6	600	40 ± 0.7	0.4	15	1.3
HDDC-2000-8000-K6-30-NS	2~8	600	30 ± 0.8	0.4	14	1.4
HDDC-2000-8000-K6-40-NS	2~8	600	40 ± 0.8	0.4	14	1.4
HDDC-0.009-100-K5-50-NS	9KHz~0.1	500	50 ± 1	0.3	16	1.2
HDDC-0.01-100-K5-50-NS	10KHz~0.1	500	50 ± 1	0.5	16	1.3
HDDC-225-460-K5-30-N	0.225~0.46	500	30 ± 1	0.3	20	1.1
HDDC-400-2500-K5-50-NS	0.4~2.5	500	50 ± 1.2	0.3	18	1.3
HDDC-500-3000-K5-60-NS	0.5~3	500	60 ± 2	0.4	16	1.4
HDDC-700-6000-K5-35-NS	0.7~6	500	35 ± 1	0.5	12	1.7
HDDC-1000-2000-K5-30-N	1~2	500	30 ± 1	0.25	26	1.5
HDDC-1000-2000-K5-50-N	1~2	500	50 ± 1	0.25	26	1.5
HDDC-1000-6000-K5-40-NS	1~6	500	40 ± 1	0.5	12	1.7
HDDC-2000-4000-K5-50-NS	2~4	500	50 ± 1.5	0.4	20	1.25
HDDC-500-6000-K4-40-N	0.5~6	400	40 ± 2	0.5	15	1.5
HDDC-500-18000-K4-30-NS	0.5~18	400	30 ± 1.2	1	10	1.6
HDDC-500-18000-K4-30-NS	0.5~18	400	40 ± 1.2	1	10	1.6
HDDC-1000-18000-K4-30-NS	1~18	400	30 ± 1.2	0.8	10	1.6
HDDC-1000-18000-K4-40-NS	1~18	400	40 ± 1.2	0.8	10	1.6
HDDC-2000-5000-K4-45-NS	2~5	400	45 ± 1.5	0.5	10	1.5
HDDC-2000-6000-K4-40-8S	2~6	400	40 ± 1	0.3	15	1.5
HDDC-2000-18000-K4-30-NS	2~18	400	30 ± 1	0.6	10	1.6
HDDC-2000-18000-K4-40-NS	2~18	400	40 ± 1	0.6	10	1.6
HDDC-4000-6000-K4-40-NS	4~6	400	40 ± 1.5	0.6	10	1.3
HDDC-6000-18000-K4-30-NS	6~18	400	30 ± 1	0.5	10	1.6
HDDC-6000-18000-K4-40-NS	6~18	400	40 ± 1	0.5	10	1.6

Rev.	Description	Date
A0	New release	2016.05.17

1.PHYSICAL CHARACTERISTICS(mm)



2.ELECTRONICAL SCHEMATIC



3.ELECTRONICAL SPECIFICATIONS

Frequency: 10-540MHz

Coupling: 19.8±0.5dB

Mainline loss: 0.6dB Max(0.2dB Typ.)

Directivity: 16dB Min(28dB Typ.)

VSWR: 1.1:1

Input power: 25W Max

Operating temperature: -40℃ to +85℃

Storage temperature: -55℃ to +100℃

Note:

1.Solderability:leads shall meet MIL-STD-202, Method 208D for solderability.

2.Flammability: UL94V-0

3.ASTM oxygen index: >28%

NAME:	Bi-Directional coupler		
CUSTOMER P/N:		DATE:	2016-05-17
SHINHOM P/N:	RF-2C-5S101	REV: A0	PAGE
DRAWN BY	CHECKED BY	APPROVE BY	

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SHAANXISHINHOM ENTERPRISE CO LTD

WAVEGUIDE COUPLER

Structural Category

Part No.	Feature	Application	Image
Broadwall Directional Coupler	Full waveguide bandwidth,coupling selection is 2~60dBthe directivity is 40–20dB coupling flatness is best.	High precision measurement, monitoring and rmeasuringsystem.	
Crossguide Directional Coupler	20%~100% of waveguide bandwidth, coupling selectionis 20–60dB, coupling flatness isbetter than loop coupler, the directivity is 23–15dB	System monitoring and measurement.	
Waveguide Loop Coupler	20% of waveguide bandwidth,coupling selection is 20–60dB, the directivity is 20–15dB, small size.	Used under 10GHz of waveguide system monitoring and measurement.	
3dB Waveguide Coupler	20% of waveguide bandwidth,coupling selection is 3dB, the output phase difference of two lines is 90 degree.	Power combiner or divider.	
Waveguide Probe Coupler	20% of waveguide bandwidth,coupling selection is 10–60dB no directivity, smallest size.	Simple system testing.	

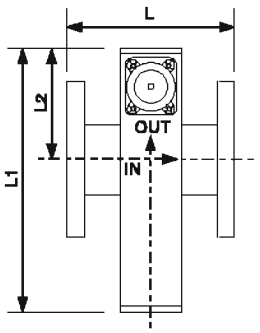
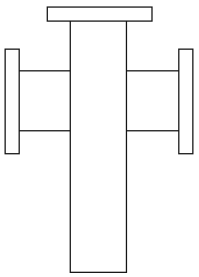
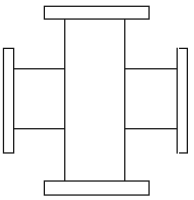
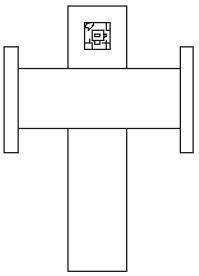
Crossguide Directional Coupler

WL+C…c

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Band width	VSWR (Main Line)	VSWR (Secondary Line)	Optional Coupling (dB)	Directivity (dB)	Flange	Coupling Output Connector	Dimensions (mm) L*L1*L2	Material
SH-12WL+C…N	WR770	0.96-1.46	≤20%	≤1.10	≤1.25	20-60	≥15	FDP	N Female	400*760*250	Al
SH-14WL+C…N	WR650	1.13-1.73	≤20%	≤1.10	≤1.25	20-60	≥15	FDP	N Female	320*480*160	Al
SH-18WL+C…N	WR510	1.45-2.20	≤20%	≤1.10	≤1.25	20-60	≥15	FDP	N Female	285*510*180	Al
SH-22WL+C…N	WR430	1.72-2.61	≤20%	≤1.10	≤1.25	20-60	≥15	FDP	N Female	240*390*140	Al
SH-26WL+C…N	WR340	2.17-3.30	≤20%	≤1.10	≤1.25	20-60	≥15	FDP	N Female	190*280*110	Al
SH-32WL+C…N	WR284	2.60-3.95	≤20%	≤1.10	≤1.25	20-60	≥15	FDP	N Female	180*275*88	Al
SH-40WL+C…N	WR229	3.22-4.90	≤20%	≤1.10	≤1.25	20-60	≥15	FDP	N Female	170*240*90	Al
SH-48WL+C…N	WR187	3.94-5.99	≤20%	≤1.10	≤1.25	20-60	≥15	FDP	N Female	137*200*83	Al
SH-58WL+C…N	WR159	4.64-7.05	≤20%	≤1.10	≤1.25	20-60	≥15	FDP	N Female	120*170*65	Al
SH-70WL+C…N	WR137	5.38-8.17	≤20%	≤1.10	≤1.25	20-60	≥15	FDP	N Female	90*150*60	Al
SH-84WL+C…N	WR112	6.57-9.99	≤20%	≤1.10	≤1.25	20-60	≥15	FBP	N Female	82*120*50	Cu
SH-100WL+C…N	WR90	8.2-12.40	≤20%	≤1.10	≤1.25	20-60	≥15	FBP	N Female	70*85*40	Cu
SH-120WL+C…N	WR75	9.84-15.0	≤20%	≤1.10	≤1.25	20-60	≥15	FBP	N Female	60*83*35	Cu
SH-140WL+C…S	WR62	11.9-18.0	≤20%	≤1.10	≤1.25	20-60	≥15	FBP	SMA Female	60*65*30	Cu
SH-180WL+C…S	WR51	14.5-22.0	≤20%	≤1.10	≤1.25	20-60	≥15	FBP	SMA Female	60*70*30	Cu
SH-220WL+C…K	WR42	17.6-26.7	≤20%	≤1.10	≤1.50	20-60	≥15	FBP	2.92 Female	65*54*30	Cu
SH-260WL+C…K	WR34	21.7-33.0	≤20%	≤1.10	≤1.50	20-60	≥15	FBP	2.92 Female	60*50*25	Cu
SH-320WL+C…K	WR28	26.5-40.0	≤20%	≤1.10	≤1.50	20-60	≥15	FBP	2.92 Female	42*50*20	Cu

Crossguide Directional Coupler

Product Type	WL+C...c	WL+C...	W+C...	WL+CB...c
Schematic				
WG Type	WR975–WR28	WR975–WR10	WR975–WR10	WR975–WR28
Working Bandwidth	F0+10%	F0+10%	F0+10%	F0+10%
Optional Coupling...(dB)	20–60	20–60	20–60	20–60
Coupling Accuracy(dB)	+0.5–+1.0	+0.5–+1.0	+0.5–+1.0	+0.5–+1.0
Directivity(dB)	15–20	15–20	15–20	15–20
VSWR(Main Line)	1.10	1.10	1.10	1.10
Coupling Output	N,SMA,2.92	Waveguide	Waveguide	N,SMA,2.92

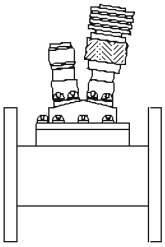
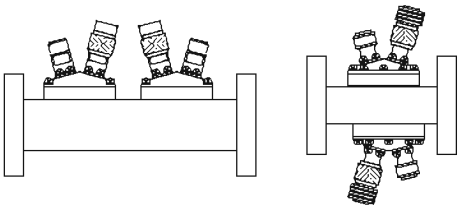
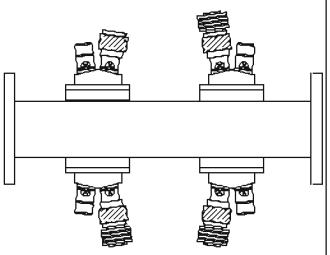
Waveguide Coupler

Waveguide Loop Coupler

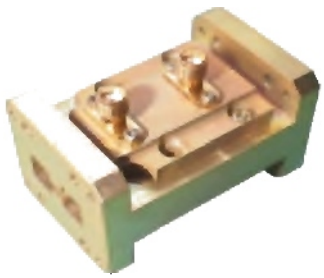
ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Band width	Optional Coupling (dB)	Directivity (dB)	VSWR (Main Line)	VSWR (Secondary Line)	Flange	Connector	Length (mm)	Material
SH-9WHC...N	WR975	0.75-1.15	≤20%	20-60	≥15	≤1.10	≤1.25	FDP	N Female	300	Al
SH-12WHC...N	WR770	0.96-1.46	≤20%	20-60	≥15	≤1.10	≤1.25	FDP	N Female	200	Al
SH-14WHC...N	WR650	1.13-1.73	≤20%	20-60	≥15	≤1.10	≤1.25	FDP	N Female	220	Al
SH-16WHC...N	WR510	1.45-2.20	≤20%	20-60	≥15	≤1.10	≤1.25	FDP	N Female	210	Al
SH-22WHC...N	WR430	1.72-2.61	≤20%	20-60	≥15	≤1.10	≤1.25	FDP	N Female	160	Al
SH-26WHC...N	WR340	2.17-3.30	≤20%	20-60	≥15	≤1.10	≤1.25	FDP	N Female	160	Al
SH-32WHC...N	WR284	2.60-3.95	≤20%	20-60	≥15	≤1.10	≤1.25	FDP	N Female	150	Al
SH-40WHC...N	WR229	3.22-4.90	≤20%	20-60	≥15	≤1.10	≤1.25	FDP	N Female	130	Al
SH-48WHC...N	WR187	3.94-5.99	≤20%	20-60	≥15	≤1.10	≤1.25	FDP	N Female	130	Al
SH-58WHC...N	WR159	4.64-7.05	≤20%	20-60	≥15	≤1.10	≤1.25	FDP	N Female	130	Al
SH-70WHC...N	WR137	5.38-8.17	≤20%	20-60	≥15	≤1.10	≤1.25	FDP	N Female	130	Al
SH-84WHC...N	WR112	6.57-9.99	≤20%	20-60	≥15	≤1.10	≤1.25	FBP	N Female	130	Cu
SH-100WHC...N	WR90	8.2-12.4	≤20%	20-60	≥15	≤1.10	≤1.25	FBP	N Female	100	Cu

Waveguide Loop Coupler

Description	Loop Coupler	Dual Directional Loop Coupler		Four Directional Loop Coupler
Model	WHC…c	WHHC…c	WDHC…c	WDHHC…c
Outline Drawings				
WG Type	WR975–WR28	WR975–WR28	WR975–WR28	WR975–WR28
Working Bandwidth	F0+10%	F0+10%	F0+10%	F0+10%
Optional Coupling..(dB)	20–60	20–60	20–60	20–60
Directivity(dB)	15	15	15	15
VSWR(Main Line)	1.10	1.10	1.10	1.10
VSWR(Secondary Line)	1.25	1.25	1.25	1.25
Connector	N or SMA	N or SMA	N or SMA	N or SMA

Waveguide Coupler



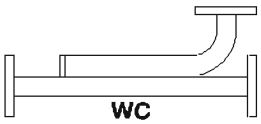
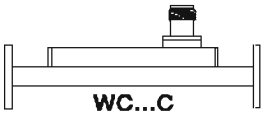
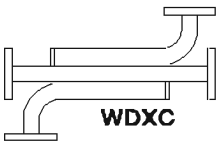
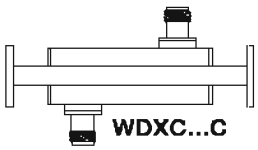
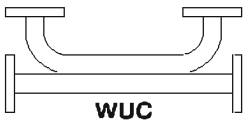
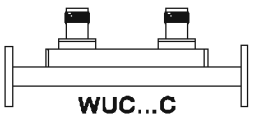
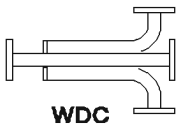
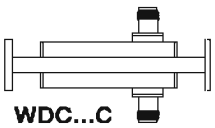
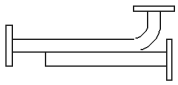
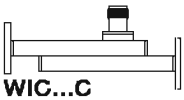
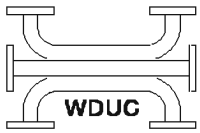
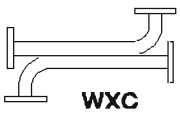
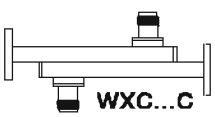
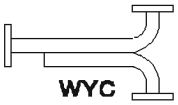
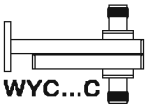
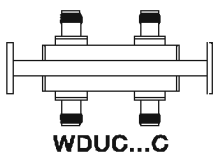
Double-Ridged Waveguide Loop Coupler

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Optional Coupling (dB)	Directivity (dB)	VSWR (Main Line)	VSWR (Secondary Line)	Flange	Connector	Length (mm)	Material
SH-84DRWHC...N	WRD84	0.84-2	20-60	≥15	≤1.15	≤1.60	FP	N Female	300	Al
SH-150DRWHC...N	WRD150	1.5-3.6	20-60	≥15	≤1.15	≤1.60	FP	N Female	200	Al
SH-200DRWHC...N	WRD200	2-4.8	20-60	≥15	≤1.15	≤1.60	FP	N Female	160	Al
SH-250DRWHC...N	WRD250	2.6-7.8	20-60	≥15	≤1.15	≤1.60	FP	N Female	150	Al
SH-350DRWHC...N	WRD350	3.5-8.2	20-60	≥15	≤1.15	≤1.60	FP	N Female	120	Al
SH-475DRWHC..N	WRD475	4.75-11	20-60	≥15	≤1.15	≤1.60	FP	N Female	100	Al
SH-500DRWHC...N	WRD500	5-18	20-60	≥15	≤1.15	≤1.60	FP	N Female	100	Al
SH-580DRWHC..N	WRD580	5.8-18	20-60	≥15	≤1.15	≤1.60	FP	N Female	100	Al
SH-650DRWHC...N	WRD650	6.5-18	20-60	≥15	≤1.15	≤1.60	FP	N Female	100	Al
SH-750DRWHC...N	WRD750	7.5-18	20-60	≥15	≤1.15	≤1.60	FP	N Female	100	Al
SH-700DRWHC..N	WRD700	7-18.5	20-60	≥15	≤1.15	≤1.60	FP	N Female	100	Al
SH-1100DRWHC...N	WRD110	11-26.5	20-60	≥15	≤1.20	≤2.00	FP	SMA Female	80	Cu
SH-1800DRWHC...N	WRD180	18-40	20-60	≥15	≤1.20	≤2.00	FP	SMA Female	80	Cu

Waveguide Coupler

Broadwall Directional Coupler

Product Type	Outline Drawings	WG Type	Working Bandwidth	Optional Coupling dB	Avg Coupling Accuracy(dB)	Coupling Flatness(dB)	Directivity (dB)
Sigle Diretional	 WC	WR975–WR10	Full Band	3–60	±0.7–±1.5	±0.7–±1.5	30–40
	 WC...C	WR975–WR10	Full Band	3–60	±0.7–±1.5	±0.7–±1.5	30–40
Dual Diretional	 WDXC	WR975–WR10	Full Band	3–60	±0.7–±1.5	±0.7–±1.5	30–40
	 WDXC...C	WR975–WR10	Full Band	3–60	±0.7–±1.5	±0.7–±1.5	30–40
Dual Diretional	 WUC	WR975–WR10	Full Band	3–60	±0.7–±1.3	±0.5–±1.8	30–40
	 WUC...C	WR975–WR10	Full Band	3–60	±0.7–±1.3	±0.5–±1.8	30–40
Other	 WDC  WDC...C  WIC  WIC...C  WDUC						
	 WXC  WXC...C  WYC  WYC...C  WDUC...C						

Waveguide Coupler

Broadwall Directional Coupler

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Optional Coupling (dB)	Directivity (dB)	VSWR (Main Line)	VSWR (Secondary Line)	Flange	Connector	Material
SH-9WC...N	WR975	0.75-1.15	3-60	30-40	≤1.10	≤1.25	FDP	N Female	Al
SH-12WC...N	WR770	0.96-1.46	3-60	30-40	≤1.10	≤1.25	FDP	N Female	Al
SH-14WC...N	WR650	1.13-1.73	3-60	30-40	≤1.10	≤1.25	FDP	N Female	Al
SH-18WC...N	WR510	1.45-2.20	3-60	30-40	≤1.10	≤1.25	FDP	N Female	Al
SH-22WC...N	WR430	1.72-2.61	3-60	30-40	≤1.10	≤1.25	FDP	N Female	Al
SH-26WC...N	WR340	2.17-3.30	3-60	30-40	≤1.10	≤1.25	FDP	N Female	Al
SH-32WC...N	WR284	2.60-3.95	3-60	30-40	≤1.10	≤1.25	FDP	N Female	Al
SH-40WC...N	WR229	3.22-4.90	3-60	30-40	≤1.10	≤1.25	FDP	N Female	Al
SH-48WC...N	WR187	3.94-5.99	3-60	30-40	≤1.10	≤1.25	FDP	N Female	Al
SH-58WC...N	WR159	4.64-7.05	3-60	30-40	≤1.10	≤1.25	FDP	N Female	Al
SH-70WC...N	WR137	5.36-8.17	3-60	30-40	≤1.10	≤1.25	FDP	N Female	Al
SH-84WC...N	WR112	6.57-9.99	3-60	30-40	≤1.10	≤1.25	FBP	N Female	Cu
SH-100WC...N	WR90	8.20-12.40	3-60	30-40	≤1.10	≤1.25	FBP	N Female	Cu
SH-120WC...N	WR75	9.84-15.0	3-60	30-40	≤1.10	≤1.25	FBP	N Female	Cu
SH-140WC...S	WR62	11.9-18.0	3-60	30-40	≤1.10	≤1.25	FBP	SMA Female	Cu
SH-180WC...S	WR51	14.5-22.0	3-60	30-40	≤1.10	≤1.25	FBP	SMA Female	Cu
SH-220WC...K	WR42	17.6-26.7	3-60	30-40	≤1.10	≤1.50	FBP	2.92 Female	Cu
SH-260WC...k	WR34	21.7-33.0	3-60	30-40	≤1.10	≤1.50	FBP	2.92 Female	Cu
SH-320WC...K	WR28	26.5-40.0	3-60	30-40	≤1.10	≤1.50	FBP	2.92 Female	Cu
SH-400WC...	WR22	32.9-50.1	3-60	30-40	≤1.10	≤1.25	FUGP	WR22	Cu
SH-500WC...	WR19	39.2-59.6	3-60	30-40	≤1.10	≤1.25	FUGP	WR19	Cu
SH-620WC...	WR15	49.8-75.8	3-60	30-40	≤1.10	≤1.25	FUGP	WR15	Cu
SH-740WC...	WR12	60.5-91.9	3-60	30-40	≤1.10	≤1.25	FUGP	WR12	Cu
SH-900WC...	WR10	73.8-112	3-60	30-40	≤1.10	≤1.25	FUGP	WR10	Cu

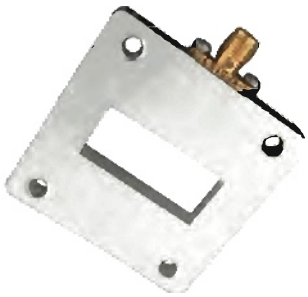
Waveguide Coupler

Double-Ridged Wavequide
Broadwall Directional Coupler

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Optional Coupling (dB)	Coupling Coupling (dB)	Directivity (dB)	VSWR (Main Line)	VSWR (Secondary Line)	Flange	Connector	Material
SH-84DRWC...N	WRD84	0.84-2	20-60	±1.5	≥25	≤1.10	≤1.5	FP	N Female	Al
SH-150DRWC...N	WRD150	1.5-3.6	20-60	±1.5	≥25	≤1.10	≤1.5	FP	N Female	Al
SH-200DRWC...N	WRD200	2-4.8	20-60	±1.5	≥25	≤1.10	≤1.5	FP	N Female	Al
SH-250DRWC...N	WRD250	2.6-7.8	20-60	±1.5	≥25	≤1.10	≤1.5	FP	N Female	Al
SH-350DRWC...N	WRD350	3.5-8.2	20-60	±1.5	≥25	≤1.10	≤1.5	FP	N Female	Al
SH-475DRWC...N	WRD475	4.75-11	20-60	±1.5	≥25	≤1.10	≤1.5	FP	N Female	Al
SH-500DRWC...N	WRD500	5-18	20-60	±1.5	≥25	≤1.10	≤1.5	FP	N Female	Al
SH-580DRWC...N	WRD580	5.8-16	20-60	±1.5	≥25	≤1.10	≤1.5	FP	N Female	Al
SH-650DRWC...N	WRD650	6.5-18	20-60	±1.5	≥25	≤1.10	≤1.5	FP	N Female	Al
SH-750DRWC...N	WRD750	7.5-18	20-60	±1.5	≥25	≤1.10	≤1.5	FP	N Female	Al
SH-700DRWC...N	WRD700	7-18.5	20-60	±1.5	≥25	≤1.10	≤1.5	FP	N Female	Al
SH-1100DRWC...N	WRD110	11-26.5	20-60	±1.5	≥25	≤1.10	≤1.5	FP	SMA Female	Cu
SH-1800DRWC...N	WRD180	18-40	20-60	±1.5	≥25	≤1.10	≤1.5	FP	SMA Female	Cu

Waveguide Coupler

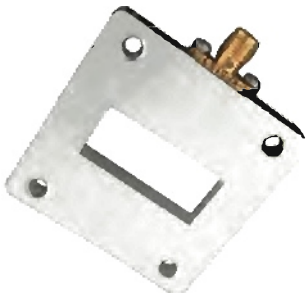


Waveguide Probe Coupler

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Optional Coupling (dB)	Connector	VSWR (Main Line)	Flange	Material
SH-40WTC...N	WR229	3.22-4.90	30-60	N Female	≤1.05	FDP	Al
SH-48WTC...N	WR187	3.94-5.99	30-60	N Female	≤1.05	FDP	Al
SH-58WTC...N	WR159	4.64-7.05	30-60	N Female	≤1.05	FDP	Al
SH-70WTC...N	WR137	5.38-8.17	30-60	N Female	≤1.05	FDP	Al
SH-84WTC...N	WR112	6.57-9.99	30-60	N Female	≤1.05	FBP	Cu
SH-100WTC...N	WR90	8.20-12.40	30-60	N Female	≤1.05	FBP	Cu
SH-120WTC...N	WR75	9.84-15.0	30-60	N Female	≤1.05	FBP	Cu
SH-140WTC...S	WR62	11.9-18.0	30-60	SMA Female	≤1.05	FBP	Cu
SH-180WTC...S	WR51	14.5-22.0	30-60	SMA Female	≤1.05	FBP	Cu
SH-220WTC...K	WR42	17.6-26.7	30-60	2.92 Female	≤1.05	FBP	Cu
SH-260WTC...K	WR34	21.7-33.0	30-60	2.92 Female	≤1.05	FBP	Cu
SH-320WTC...K	WR28	26.5-40.0	30-60	2.92 Female	≤1.05	FBP	Cu

Waveguide Coupler



Circular Waveguide Probe Coupler

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR	Coupling (dB)	Inner Diameter (mm)	Connector	Material	Finish
SH-100CWTC30N	2.0~4.0	≤1.1	30	100	N Female	Al	Chromate Conversion
SH-61.04CWTC30N	3.3~3.8	≤1.1	30	61.04	N Female	Al	Chromate Conversion
SH-5199CWTC30N	3.89-5.33	≤1.1	30	51.99	N Female	Al	Chromate Conversion
SH-37CWTC30N	4.5~6.5	≤1.1	30	37	N Female	Al	Chromate Conversion
SH-27.78CWTC30S	7.4~9.0	≤1.1	30	27.78	SMA Female	Al	Chromate Conversion
SH-23.825CWTC30S	9.1~10.0	≤1.1	30	23.825	SMA Female	Al	Chromate Conversion
SH-20.244CWTC30S	8.5~10.5	≤1.1	30	20.244	SMA Female	Al	Chromate Conversion
SH-14CWTC30S	15.0~17.0	≤1.1	30	14	SMA Female	Cu	Silver Plating
SH-1125CWTC30S	18.2~24.9	≤1.1	30	11.25	SMA Female	Cu	Silver Plating
SH-11CWTC30S	17.7-21.2	≤1.1	30	11	SMA Female	Cu	Silver Plating
SH-7.137CWTC30S	27.5~31	≤1.1	30	7.137	SMA Female	Cu	Silver Plating

Waveguide Coupler

Waveguide Single Channel Rotary Joint

Model	Type	Product Image	VSWR WOW	IL WOW (dB)	Life Time (20 RPM)
I	I Type		≤0.05	≤0.05	3x10^6 Revolutions
L	L Type		≤0.05	≤0.05	3x10^6 Revolutions
U	U Type		≤0.05	≤0.05	3x10^6 Revolutions

Waveguide Filter

Waveguide Bandpass Filter

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Band	Pass Band(GHz)	Rejection Band(GHz)	VSWR	IL(dB)	Material
SH-70WBPF	WR137	C	5.85-6.425	3.4-4.2	≤1.20	≤0.4	Cu
SH-84WBPF	WR112	X	7.9-8.4	7.25-7.75	≤1.20	≤0.6	Cu
SH-100WBPF	WR90	X	8-9	7.125-7.235	≤1.20	≤0.5	Cu
SH-120WBPF	WR75	Ku	11.7-12.75	14-14.5	≤1.20	≤0.3	Cu
SH-140WBPF	WR62	Ku	13.3-13.7	15.3-15.5	≤1.20	≤0.3	Cu
SH-220WBPF	WR42	Ka	20-22	30-31	≤1.25	≤0.5	Cu
SH-260WBPF	WR34	Ka	24.5-27	≤22GHz ≤20GHz	≤1.20	≤0.3	Cu
SH-320WBPF	WR28	Ka	30.5-31.3	26-28.35GHz	≤1.20	≤0.6	Cu

Waveguide High-pass Filter

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Band	Pass Band (GHz)	Rejection Band (GHz)	VSWR	IL(dB)	Isolation (dB)	Material
SH-260WHPF	WR34	Ka	25-26	16	≤1.2	≤0.2	≥80	Cu
SH-320WHPF	WR28	Ka	29-31.2	19-21	≤1.2	≤0.2	≥70	Cu

Waveguide Low-pass Filter

ELECTRICAL CHARACTERISTICS:

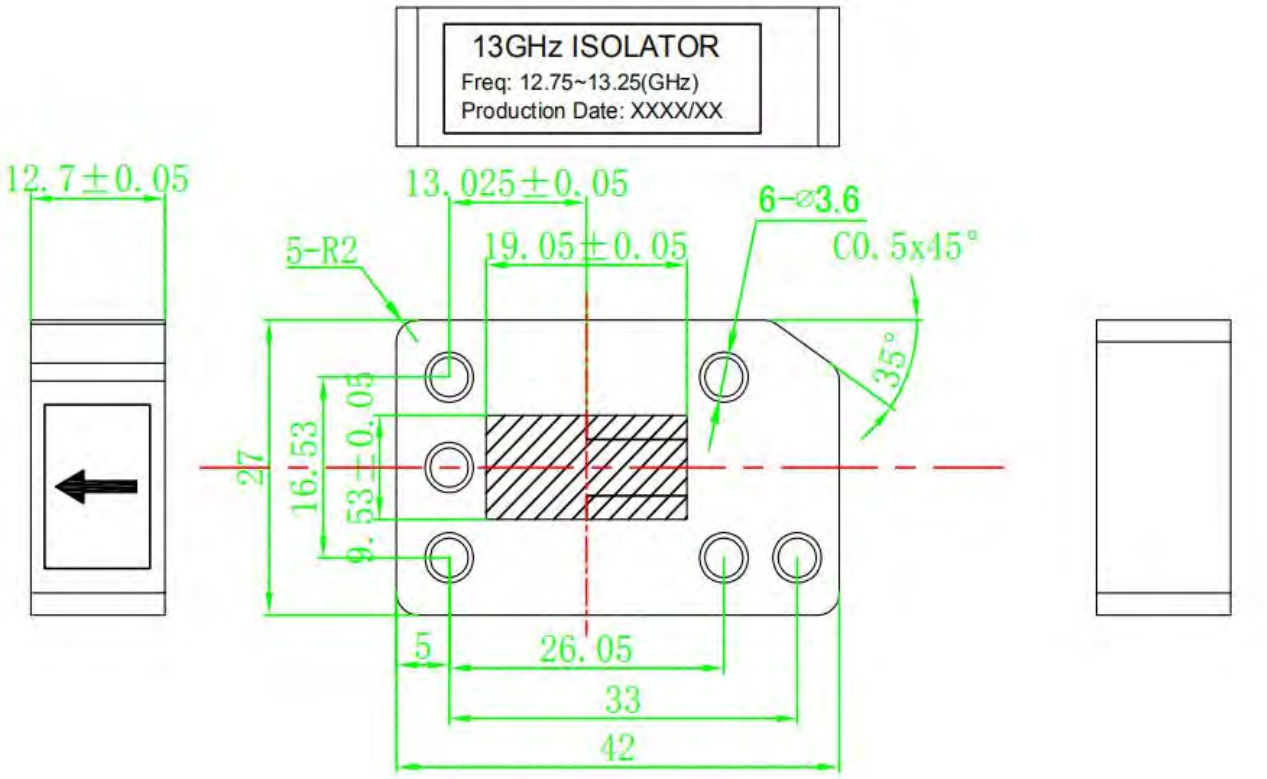
Part No.	WG Type EIA	Band	Pass Band (GHz)	Rejection Band (GHz)	VSWR	IL(dB)	Isolation (dB)	Material
SH-40WLPF	WR229	C	4.5-4.8	6.725-7.025	≤1.2	≤0.3	≥55	Al
SH-120WLPF	WR75	Ku	11.6-12.8	13.5-15	≤1.2	≤0.25	≥60	Cu
SH-220WLPF	WR42	Ka	20.4-20.9	30-31	≤1.2	≤0.3	≥55	Cu

1.Features

Wide Operation Temperature Range -45 ~ 90

2.Dimensions

Unit:mm



3.Specifications

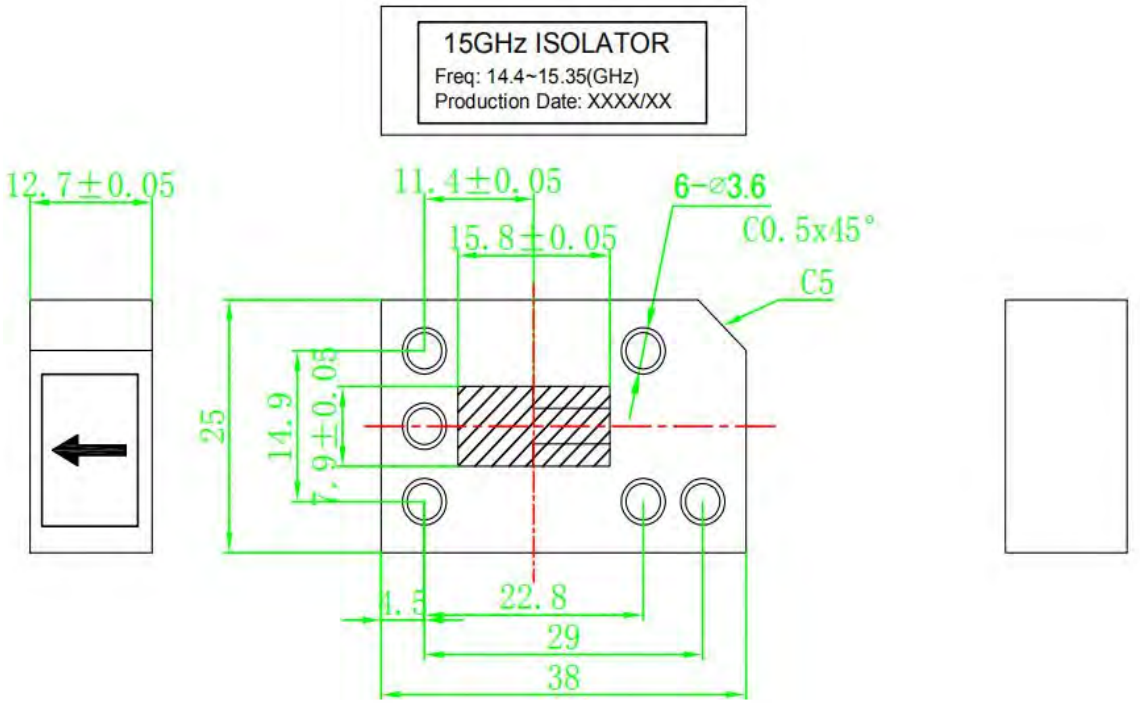
Part No.	Frequency (GHz)		Center Frequency	Bandwidth	Isolation	INS LOSS	VSWR	Power	IMD (@2X43dBm)
	F1	F2	(GHz)	(GHz)	(dB) MIN	(dB) MAX	MAX	(W)	(-dBc) MAX
BG120-12.7A/12.75-13.25GHZ	12.750	13.250	13.0000	0.500	20	0.4	1.22	10	

1.Features

Wide Operation Temperature Range -45 ~ 90

2.Dimensions

Unit:mm



3.Specifications

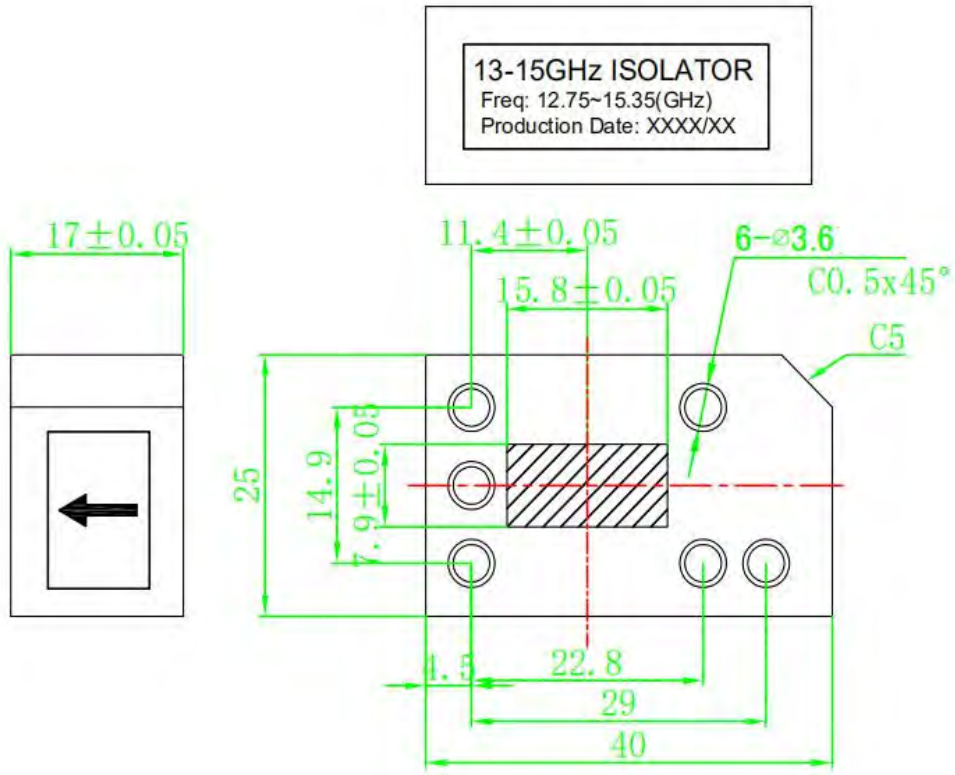
Part No.	Frequency (GHz)		Center Frequency	Bandwidth	Isolation	INS LOSS	VSWR	Power	IMD (@2X43dBm)
	F1	F2	(GHz)	(GHz)	(dB) MIN	(dB) MAX	MAX	(W)	(-dBc) MAX
BG140-12.7A/14.4-15.35GHZ	14.400	15.350	14.8750	0.950	20	0.4	1.22	10	

1.Features

Wide Operation Temperature Range -45 ~ 90

2.Dimensions

Unit:mm



3.Specifications

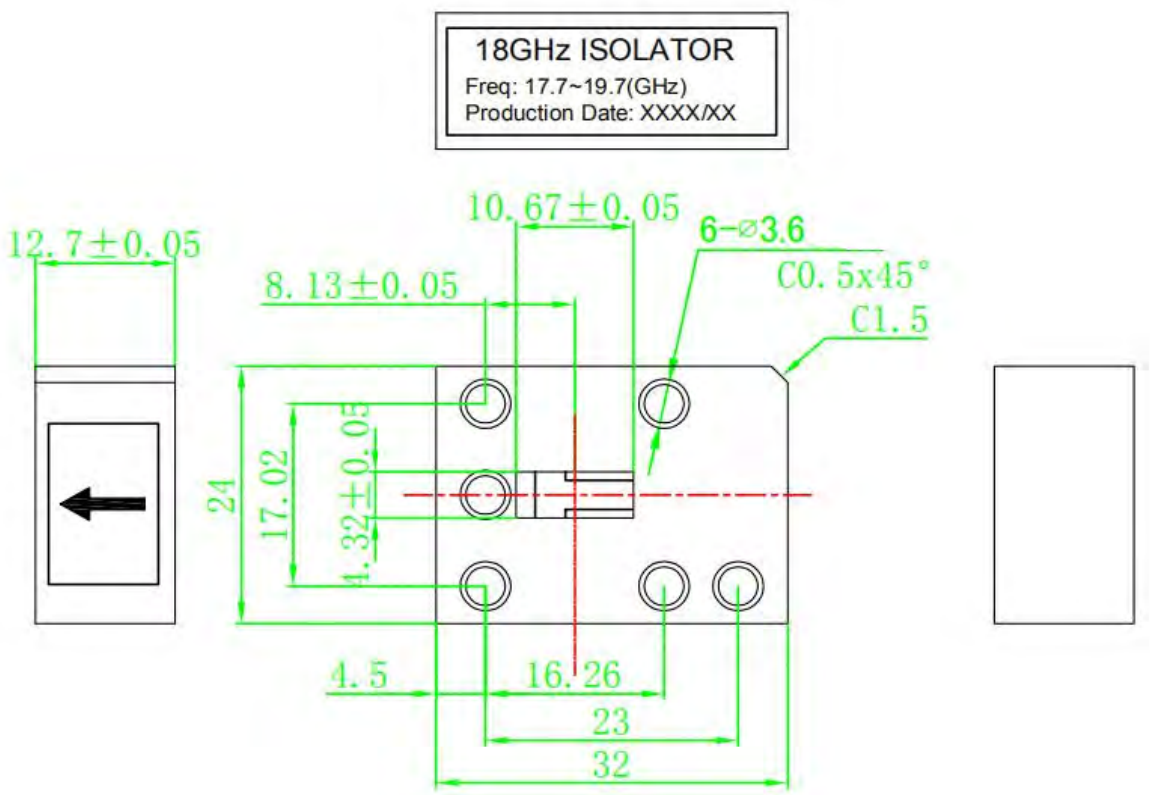
Part No.	Frequency (GHz)		Center Frequency	Bandwidth	Isolation	INS LOSS	VSWR	Power	IMD (@2X43dBm)
	F1	F2	(GHz)	(GHz)	(dB) MIN	(dB) MAX	MAX	(W)	(-dBc) MAX
BG140-17A/12.75-15.35GHZ	12.750	15.350	14.0500	2.600	20	0.4	1.22	10	

1.Features

Wide Operation Temperature Range -45 ~ 90

2.Dimensions

Unit:mm



3.Specifications

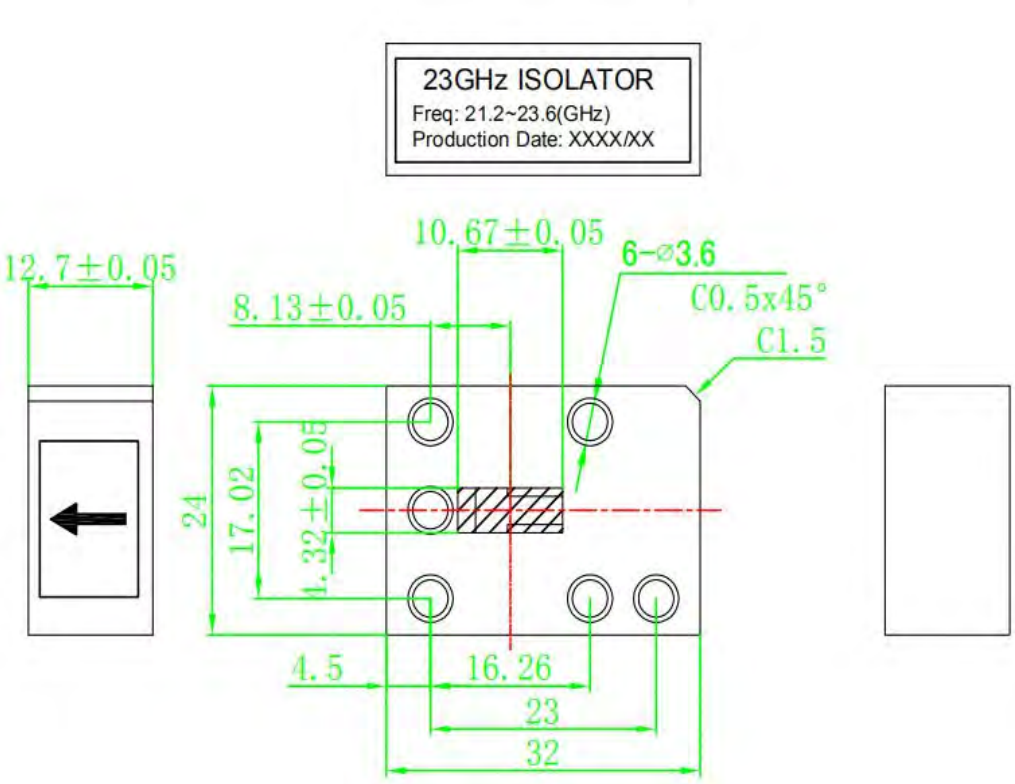
Part No.	Frequency (GHz)		Center Frequency	Bandwidth	Isolation	INS LOSS	VSWR	Power	IMD (@2X43dBm)
	F1	F2	(GHz)	(GHz)	(dB) MIN	(dB) MAX	MAX	(W)	(-dBc) MAX
BG220-12.7A/17.7-19.7GHZ	17.700	19.700	18.7000	2.000	20	0.4	1.22	10	

1.Features

Wide Operation Temperature Range -45 ~ 90

2.Dimensions

Unit:mm



3.Specifications

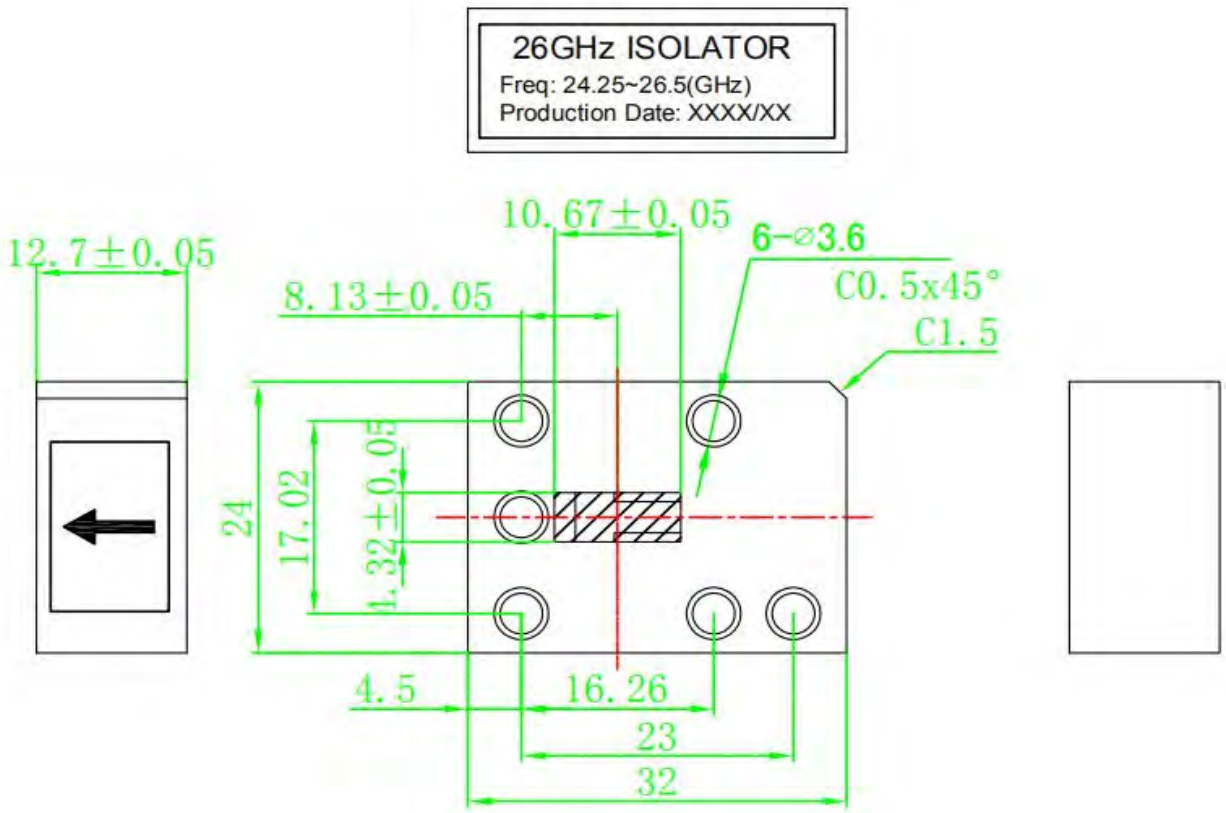
Part No.	Frequency (GHz)		Center Frequency	Bandwidth	Isolation	INS LOSS	VSWR	Power	IMD (@2X43dBm)
	F1	F2	(GHz)	(GHz)	(dB) MIN	(dB) MAX	MAX	(W)	(-dBc) MAX
BG220-12.7A/21.2-23.6GHZ	21.200	23.600	22.4000	2.400	20	0.4	1.22	10	

1.Features

Wide Operation Temperature Range -45 ~ 90

2.Dimensions

Unit:mm



3.Specifications

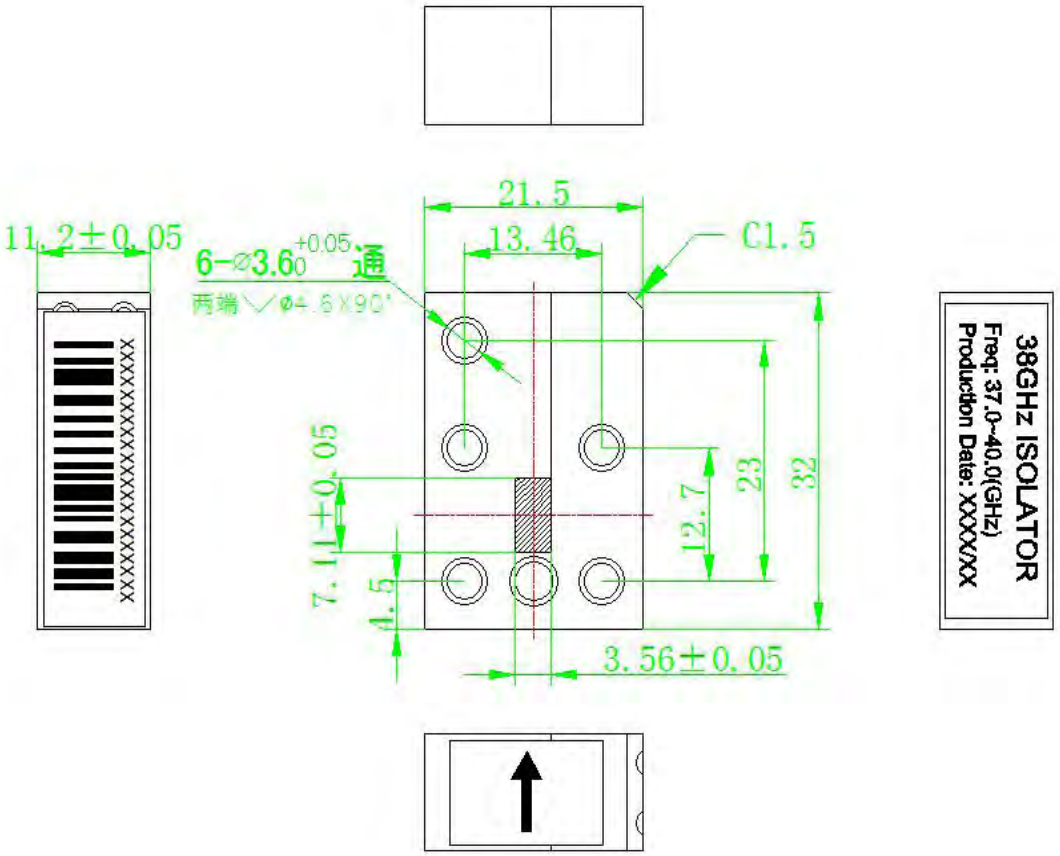
Part No.	Frequency (GHz)		Center Frequency	Bandwidth	Isolation	INS LOSS	VSWR	Power	IMD (@2X43dBm)
	F1	F2	(GHz)	(GHz)	(dB) MIN	(dB) MAX	MAX	(W)	(-dBc) MAX
BG220-12.7A/24.25-26.5GHZ	24.250	26.500	25.3750	2.250	20	0.4	1.22	10	

1.Features

Wide Operation Temperature Range -45 ~ 90

2.Dimensions

Unit:mm



3.Specifications

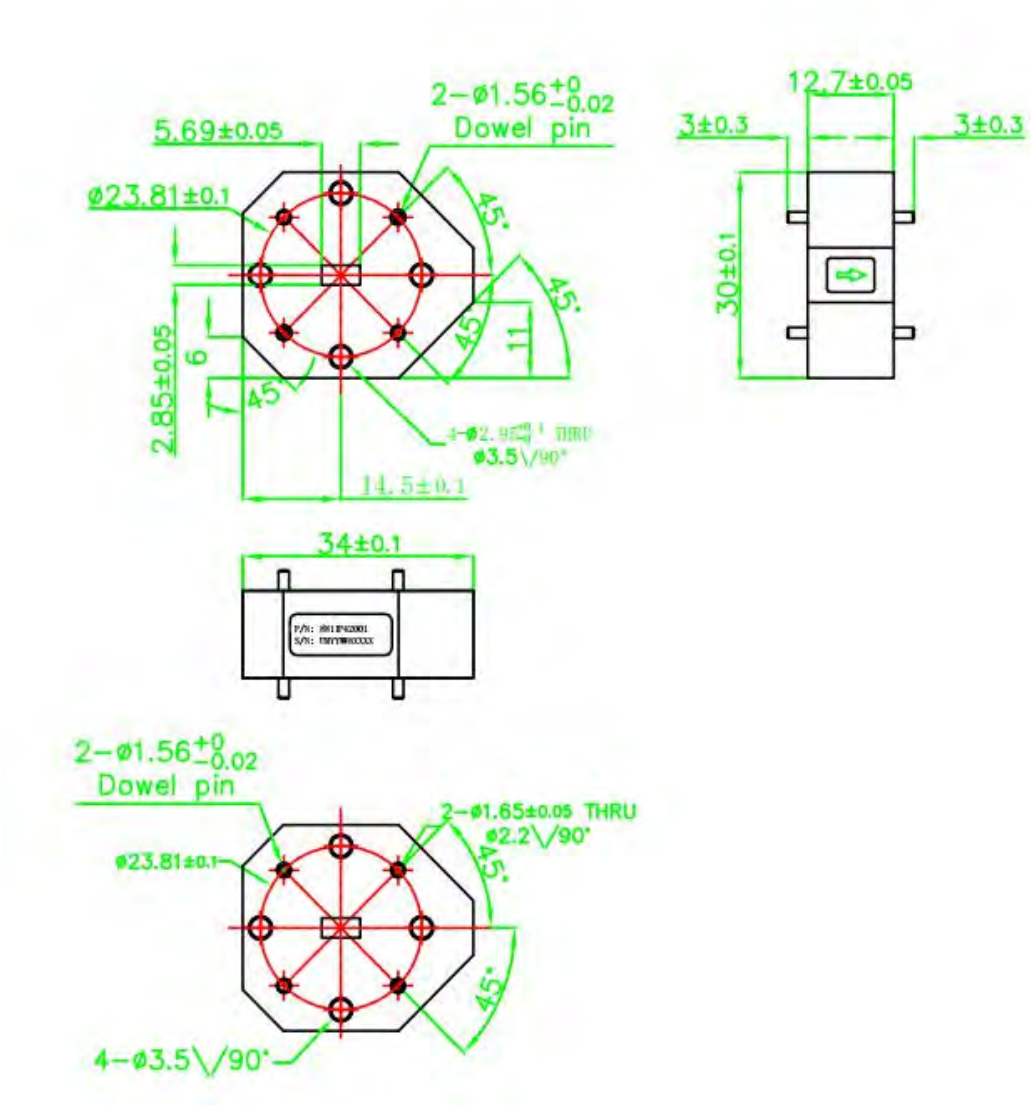
Part No.	Frequency (GHz)		Center Frequency	Bandwidth	Isolation	INS LOSS	VSWR	Power	IMD (@2X43dBm)
	F1	F2	(GHz)	(GHz)	(dB) MIN	(dB) MAX	MAX	(W)	(-dBc) MAX
BG320-11.2A/37-40GHZ	37.000	40.000	38.5000	3.000	20	0.4	1.22	10	

1.Features

Wide Operation Temperature Range -45 ~ 90

2.Dimensions

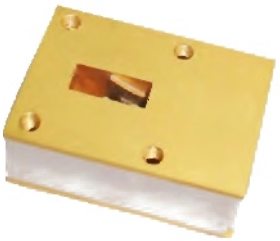
Unit:mm



3.Specifications

Part No.	Frequency (GHz)		Center Frequency	Bandwidth	Isolation	INS LOSS	VSWR	Power	IMD (@2X43dBm)
	F1	F2	(GHz)	(GHz)	(dB) MIN	(dB) MAX	MAX	(W)	(-dBc) MAX
BG400-12.7A/37-40GHZ	40.500	43.500	42.0000	3.000	18	0.4	1.28	10	

Waveguide Isolator



Waveguide Isolator

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR	IL(dB)	Isolation (dB)	Flange	Material
SH-14WISO...	WR650	1.13-1.73	≤5%	≤1.2	≤0.3	≥20	FDP	Al
SH-18WISO...	WR510	1.45-2.20	≤5%	≤1.2	≤0.3	≥20	FDP	Al
SH-22WISO...	WR430	1.72-2.61	≤5%	≤1.2	≤0.3	≥20	FDP	Al
SH-28WISO...	WR340	2.17-3.30	≤5%	≤1.2	≤0.3	≥20	FDP	Al
SH-32WISO...	WR284	2.60-3.95	≤5%	≤1.2	≤0.3	≥20	FDP	Al
SH-40WISO...	WR229	3.22-4.90	≤10%	≤1.2	≤0.3	≥20	FDP	Al
SH-48WISO...	WR187	3.94-5.99	≤10%	≤1.2	≤0.3	≥20	FDP	Al
SH-58WISO..	WR159	4.64-7.05	≤10%	≤1.2	≤0.3	≥20	FDP	Al
SH-70WISO...	WR137	5.38-8.17	≤10%	≤1.2	≤0.3	≥20	FDP	Al
SH-84WISO...	WR112	6.57-9.99	≤15%	≤1.2	≤0.3	≥20	FBP	Al
SH-100WISO...	WR90	8.2-12.5	≤15%	≤1.2	≤0.3	≥20	FBP	Al
SH-120WISO...	WR75	9.84-15.0	≤15%	≤1.2	≤0.3	≥20	FBP	Al
SH-140WISO...	WR62	11.9-18.0	≤15%	≤1.2	≤0.3	≥20	FBP	Al
SH-180wISO...	WR51	14.5-22.0	≤15%	≤1.2	≤0.3	≥20	FBP	Al
SH-220WISO...	WR42	17.6-26.7	≤15%	≤1.25	≤0.4	≥20	FBP	Cu
SH-260WISO..	WR34	21.7-33.0	≤15%	≤1.25	≤0.4	≥20	FBP	Cu
SH-320WISO...	WR28	26.5-40.0	≤15%	≤1.25	≤0.4	≥20	FBP	Cu
SH-400WISO...	WR22	32.9-50.1	≤5%	≤1.5	≤0.6	≥17	FUGP	Cu
SH-500WISO..	WR19	39.2-59.6	≤5%	≤1.5	≤0.6	≥15	FUGP	Cu
SH-620WISO...	WR15	49.8-75.8	≤5%	≤1.5	≤0.6	≥15	FUGP	Cu
SH-740WISO...	WR12	60.5-91.9	≤5%	≤1.5	≤0.8	≥15	FUGP	Cu
SH-900WISO...	WR10	73.8-112	≤5%	≤1.5	≤1.0	≥15	FUGP	Cu

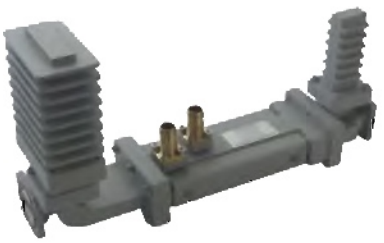
Waveguide Isolator

High Power Waveguide Isolator

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR	Isolation (dB)	Avg Power (W)	Flange	Material
SH-14WHPIS0...	WR650	1.13-1.73	≤5%	≤1.2	≥20	≤2500	FDP	Al
SH-18WHPISO...	WR510	1.45-2.20	≤5%	≤1.2	≥20	≤2500	FDP	Al
SH-22WHPISO...	WR430	1.72-2.61	≤5%	≤1.2	≥20	≤2000	FDP	Al
SH-32WHPISO...	WR284	2.60-3.95	≤5%	≤1.2	≥20	≤2000	FDP	Al
SH-40WHPISO...	WR229	3.22-4.90	≤10%	≤1.2	≥20	≤1500	FDP	Al
SH-48WHPISO...	WR187	3.94-5.99	≤10%	≤1.2	≥20	≤1500	FDP	Al
SH-58WHPISO...	WR159	4.64-7.05	≤10%	≤1.2	≥20	≤1500	FDP	Al
SH-70WHPISO...	WR137	5.38-8.17	≤10%	≤1.2	≥20	≤500	FDP	Al
SH-84WHPISO...	WR112	6.57-9.99	≤15%	≤1.25	≥20	≤500	FBP	Al
SH-100WHPISO...	WR90	8.2-12.5	≤15%	≤1.25	≥20	≤300	FBP	Al
SH-120WHPISO...	WR75	9.84-15.0	≤15%	≤1.25	≥20	≤200	FBP	Al
SH-140WHPISO...	WR62	11.9-18.0	≤15%	≤1.25	≥20	≤200	FBP	Al
SH-180WHPISO...	WR51	14.5-22.0	≤15%	≤1.25	≥20	≤100	FBP	Al
SH-220WHPISO...	WR42	17.6-26.7	≤15%	≤1.25	≥20	≤80	FBP	Cu
SH-260WHPISO...	WR34	21.7-33.0	≤15%	≤1.25	≥20	≤80	FBP	Cu
SH-320WHPISO...	WR28	26.5-40.0	≤15%	≤1.25	≥20	≤50	FBP	Cu
SH-400WHPISO...	WR22	32.9-50.1	≤5%	≤1.35	≥17	≤3	FUGP	Cu
SH-500WHPISO...	WR19	39.2-59.6	≤5%	≤1.50	≥15	≤2	FUGP	Cu
SH-520WHPISO...	WR15	49.8-75.8	≤5%	≤1.50	≥15	≤1	FUGP	Cu
SH-740WHPISO...	WR12	60.5-91.9	≤5%	≤1.50	≥15	≤1	FUGP	Cu
SH-900WHPISO...	WR10	73.8-112	≤5%	≤1.50	≥15	≤1	FUGP	Cu

Waveguide Isolator



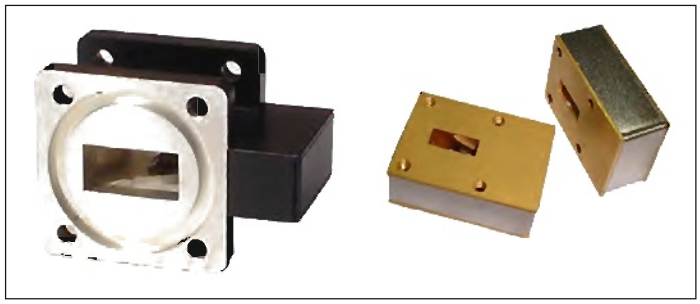
High Power Waveguide
Differential Phase Shift Isolator

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR	IL(dB)	Isolation (dB)	Avg Power (W)	Flange	Material
SH-14WHPDPSI40KW	WR650	1.13-1.73	≤5%	≤1.2	≤0.3	≥20	40k	FDP	Al
SH-18WHPDPSI30KW	WR510	1.45-2.20	≤5%	≤1.2	≤0.3	≥20	30k	FDP	Al
SH-22WHPDPSI20KW	WR430	1.72-2.61	≤5%	≤1.2	≤0.3	≥20	20k	FDP	Al
SH-26WHPDPSI20KW	WR340	2.17-3.30	≤5%	≤1.2	≤0.3	≥20	20k	FDP	Al
SH-32WHPDPSI10KW	WR284	2.60-3.95	≤5%	≤1.2	≤0.4	≥20	10k	FDP	Al
SH-40WHPDPSI5KW	WR229	3.22-4.90	≤5%	≤1.2	≤0.4	≥20	5k	FDP	Al
SH-48WHPDPSI8KW	WR187	3.94-5.99	≤5%	≤1.2	≤0.4	≥20	8k	FDP	Al
SH-84WHPDPSI1200W	WR112	6.57-9.99	≤7%	≤1.25	≤0.4	≥20	1.2k	FBP	Cu
SH-100WHPDPSI1000W	WR90	8.2-12.5	≤7%	≤1.25	≤0.5	≥20	1k	FBP	Cu
SH-120WHPDPIC1000W	WR75	9.84-15.0	≤7%	≤1.25	≤0.5	≥20	1k	FBP	Cu
SH-140WHPDPSI800W	WR62	11.9-18.0	≤7%	≤1.25	≤0.5	≥20	800	FBP	Cu
SH-180WHPDPSI800W	WR51	14.5-22.0	≤7%	≤1.25	≤0.5	≥20	800	FBP	Cu

WAVEGUIDE ISOLATOR

Shinhom Microwave offers a standard product line of waveguide isolators ranging from WR10 to WR 137. For more information feel free to call us and discuss your needs with one of our sales engineers.



ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Operating Bandwidth (MHz)	VSWR (Max)	IL (dB) (Max)	Isolation (dB) (Min)	WG Type		Flange	Material
						IEC	EIA		
SH-70WISO	5.38-8.17	700	1.20	0.3	20	R70	WR137	FDP/FDM	Al/Cu
SH-84WISO	6.57-9.99	700	1.20	0.3	20	R84	WR112	FBP/FBM/FBE	Al/Cu
SH-100WISO	8.20-12.5	800	1.20	0.3	20	R100	WR90	FBP/FBM/FBE	Al/Cu
SH-120WISO	9.84-15.0	1000	1.20	0.3	20	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-140WISO	11.9-18.0	1000	1.20	0.3	20	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-180WISO	14.5-22.0	1000	1.20	0.3	20	R180	WR51	FBP/FBM/FBE	Al/Cu
SH-220WISO	17.6-26.7	2000	1.20	0.3	20	R220	WR42	FBP/FBM/FBE	Al/Cu
SH-260WISO	21.7-33.0	2000	1.20	0.3	20	R260	WR34	FBP/FBM/FBE	Al/Cu
SH-320WISO	26.3-40.0	2000	1.20	0.3	20	R320	WR28	FBP/FBM/FBE	Al/Cu
SH-400WISO	32.9-50.1	2000	1.30	0.6	20	R400	WR22	FUGP	Cu
SH-500WISO	39.2-59.6	2000	1.30	0.6	20	R500	WR19	FUGP	Cu
SH-620WISO	49.8-75.8	2000	1.30	0.6	20	R620	WR15	FUGP	Cu
SH-740WISO	60.5-91.9	2000	1.30	0.8	20	R740	WR12	FUGP	Cu
SH-900WISO	73.8-112	2000	1.30	1.0	20	R900	WR10	FUGP	Cu

Ordering Information

Example Part No: SH – 100 WISO

- SH: Shinhom Microwave
- 100: WG type:R100
- WISO: Product Type:WG Isolator

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black/grey top coat

Waveguide Power Divider/Combiner

Waveguide E-Plane Tee

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Bandwidth	Unbalance (dB)	VSWR (E-Arm)	IL (dB)	Flange	Material
SH-3WET	WR2300	0.32-0.49	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH-4WET	WR2100	0.35-0.53	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH-5WET	WR1800	0.41-0.62	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH-6WET	WR1500	0.49-0.75	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH-8WET	WR1150	0.64-0.98	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH-9WET	WR975	0.75-1.15	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH-12WET	WR770	0.96-1.46	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH-14WET	WR650	1.13-1.73	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH-18WET	WR510	1.45-2.20	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH-22WET	WR430	1.72-2.61	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH-26WET	WR340	2.17-3.30	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH-32WET	WR284	2.60-3.95	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH-40WET	WR229	3.22-4.90	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH-48WET	WR187	3.94-5.99	≤15%	±0.35	≤1.20	≤0.2	FDP	Al
SH-58WET	WR159	4.64-7.05	≤15%	±0.35	≤1.20	≤0.2	FDP	Al
SH-70WET	WR137	5.38-8.17	≤15%	±0.35	≤1.20	≤0.3	FDP	Cu
SH-84WET	WR112	6.57-9.99	≤15%	±0.35	≤1.20	≤0.3	FBP	Cu
SH-100WET	WR90	8.20-12.40	≤15%	±0.35	≤1.20	≤0.3	FBP	Cu
SH-120WET	WR75	9.84-15.0	≤15%	±0.35	≤1.20	≤0.3	FBP	Cu
SH-140WET	WR62	11.9-18.0	≤15%	±0.40	≤1.25	≤0.3	FBP	Cu
SH-180WET	WR51	14.5-22.0	≤15%	±0.40	≤1.25	≤0.4	FBP	Cu
SH-220WET	WR42	17.6-26.7	≤15%	±0.40	≤1.25	≤0.4	FBP	Cu
SH-260WET	WR34	21.7-33.0	≤15%	±0.40	≤1.25	≤0.4	FBP	Cu
SH-320WET	WR28	26.5-40.0	≤15%	±0.40	≤1.25	≤0.4	FBP	Cu
SH-400WET	WR22	32.9-50.1	≤10%	±0.50	≤1.35	≤0.5	FUGP	Cu
SH-500WET	WR19	39.2-59.6	≤10%	±0.50	≤1.35	≤0.5	FUGP	Cu
SH-620WET	WR15	49.8-75.8	≤10%	±0.50	≤1.35	≤0.5	FUGP	Cu
SH-740WET	WR12	60.5-91.9	≤10%	±0.50	≤1.35	≤0.5	FUGP	Cu
SH-900WET	WR10	73.8-112	≤10%	±0.50	≤1.35	≤0.5	FUGP	Cu

Waveguide Power Divider/Combiner

Waveguide H–Plane Tee

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Bandwidth	Unbalance (dB)	VSWR (E–Arm)	IL (dB)	Flange	Material
SH–3WHT	WR2300	0.32–0.49	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH–4WHT	WR2100	0.35–0.53	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH–5WHT	WR1800	0.41–0.62	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH–6WHT	WR1500	0.49–0.75	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH–8WHT	WR1150	0.64–0.98	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH–9WHT	WR975	0.75–1.15	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH–12WHT	WR770	0.96–1.46	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH–14WHT	WR650	1.13–1.73	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH–18WHT	WR510	1.45–2.20	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH–22WHT	WR430	1.72–2.61	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH–26WHT	WR340	2.17–3.30	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH–32WHT	WR284	2.60–3.95	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH–40WHT	WR229	3.22–4.90	≤15%	±0.25	≤1.15	≤0.2	FDP	Al
SH–48WHT	WR187	3.94–5.99	≤15%	±0.35	≤1.20	≤0.2	FDP	Al
SH–58WHT	WR159	4.64–7.05	≤15%	±0.35	≤1.20	≤0.2	FDP	Al
SH–70WHT	WR137	5.38–8.17	≤15%	±0.35	≤1.20	≤0.3	FDP	Cu
SH–84WHT	WR112	6.57–9.99	≤15%	±0.35	≤1.20	≤0.3	FBP	Cu
SH–100WHT	WR90	8.20–12.40	≤15%	±0.35	≤1.20	≤0.3	FBP	Cu
SH–120WHT	WR75	9.84–15.0	≤15%	±0.35	≤1.20	≤0.3	FBP	Cu
SH–140WHT	WR62	11.9–18.0	≤15%	±0.40	≤1.25	≤0.3	FBP	Cu
SH–180WHT	WR51	14.5–22.0	≤15%	±0.40	≤1.25	≤0.4	FBP	Cu
SH–220WHT	WR42	17.6–26.7	≤15%	±0.40	≤1.25	≤0.4	FBP	Cu
SH–260WHT	WR34	21.7–33.0	≤15%	±0.40	≤1.25	≤0.4	FBP	Cu
SH–320WHT	WR28	26.5–40.0	≤15%	±0.40	≤1.25	≤0.4	FBP	Cu
SH–400WHT	WR22	32.9–50.1	≤10%	±0.50	≤1.35	≤0.5	FUGP	Cu
SH–500WHT	WR19	39.2–59.6	≤10%	±0.50	≤1.35	≤0.5	FUGP	Cu
SH–620WHT	WR15	49.8–75.8	≤10%	±0.50	≤1.35	≤0.5	FUGP	Cu
SH–740WHT	WR12	60.5–91.9	≤10%	±0.50	≤1.35	≤0.5	FUGP	Cu
SH–900WHT	WR10	73.8–112	≤10%	±0.50	≤1.35	≤0.5	FUGP	Cu

Waveguide Power Divider/Combiner

Waveguide Magic Tee

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	VSWR		Isolation (E–H)(dB)	Unbalance (dB)	Flange	Material
			H–Arm	E–Arm				
SH–3WMT	WR2300	0.32–0.49	≤1.20	≤1.50	≥35	≤0.25	FDP	Al
SH–4WMT	WR2100	0.35–0.53	≤1.20	≤1.50	≥35	≤0.25	FDP	Al
SH–5WMT	WR1800	0.41–0.62	≤1.20	≤1.50	≥35	≤0.25	FDP	Al
SH–6WMT	WR1500	0.49–0.75	≤1.20	≤1.50	≥35	≤0.25	FDP	Al
SH–8WMT	WR1150	0.64–0.98	≤1.20	≤1.50	≥35	≤0.25	FDP	Al
SH–9WMT	WR975	0.75–1.15	≤1.20	≤1.50	≥35	≤0.25	FDP	Al
SH–12WMT	WR770	0.96–1.46	≤1.20	≤1.50	≥35	≤0.25	FDP	Al
SH–14WMMT	WR650	1.13–1.73	≤1.20	≤1.50	≥35	≤0.25	FDP	Al
SH–18WMT	WR510	1.45–2.20	≤1.20	≤1.50	≥35	≤0.25	FDP	Al
SH–22WMT	WR430	1.72–2.61	≤1.20	≤1.50	≥35	≤0.4	FDP	Al
SH–26WMT	WR340	2.17–3.30	≤1.20	≤1.50	≥35	≤0.4	FDP	Al
SH–32WMT	WR284	2.60–3.95	≤1.20	≤1.50	≥35	≤0.4	FDP	Al
SH–40WMT	WR229	3.22–4.90	≤1.20	≤1.50	≥35	≤0.4	FDP	Al
SH–48WMT	WR187	3.94–5.99	≤1.20	≤1.50	≥35	≤0.4	FDP	Al
SH–58WMT	WR159	4.64–7.05	≤1.20	≤1.50	≥35	≤0.4	FDP	Al
SH–70WMT	WR137	5.38–8.17	≤1.20	≤1.50	≥35	≤0.4	FDP	Cu
SH–84WMMT	WR112	6.57–9.99	≤1.20	≤1.50	≥35	≤0.4	FBP	Cu
SH–100WMT	WR90	8.20–12.40	≤1.20	≤1.50	≥35	≤0.4	FBP	Cu
SH–120WMT	WR75	9.84–15.0	≤1.20	≤1.50	≥35	≤0.4	FBP	Cu
SH–140WMT	WR62	11.9–18.0	≤1.20	≤1.50	≥35	≤0.4	FBP	Cu
SH–180WMT	WR51	14.5–22.0	≤1.20	≤1.50	≥35	≤0.4	FBP	Cu
SH–220WMT	WR42	17.6–26.7	≤1.20	≤1.50	≥30	≤0.4	FBP	Cu
SH–260WMT	WR34	21.7–33.0	≤1.20	≤1.50	≥30	≤0.4	FBP	Cu
SH–320WMT	WR28	26.5–40.0	≤1.20	≤1.50	≥30	≤0.4	FBP	Cu
SH–400WMT	WR22	32.9–50.1	≤1.20	≤1.50	≥30	≤0.5	FUGP	Cu
SH–500WMT	WR19	39.2–59.6	≤1.20	≤1.50	≥30	≤0.5	FUGP	Cu
SH–620WMT	WR15	49.8–75.8	≤1.20	≤1.50	≥30	≤0.5	FUGP	Cu
SH–740WMT	WR12	60.5–91.9	≤1.20	≤1.50	≥30	≤0.5	FUGP	Cu
SH–900WMT	WR10	73.8–112	≤1.20	≤1.50	≥30	≤0.5	FUGP	Cu

Waveguide Power Divider/Combiner

In-Phase Waveguide Power Divider / Combiner

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR		Isolation (2 Balance Arms)	Distribution Ratio(dB)	Flange	Material
				H-Arm	Balance Arm				
SH-3WMT	WR2300	0.32-0.49	≤20%	≤1.20	≤1.50	≥17	3±0.25	FDP	Al
SH-4WMT	WR2100	0.35-0.53	≤20%	≤1.20	≤1.50	≥17	3±0.25	FDP	Al
SH-5WMT	WR1800	0.41-0.62	≤20%	≤1.20	≤1.50	≥17	3±0.25	FDP	Al
SH-6WMT	WR1500	0.49-0.75	≤20%	≤1.20	≤1.50	≥17	3±0.25	FDP	Al
SH-8WMT	WR1150	0.64-0.98	≤20%	≤1.20	≤1.50	≥17	3±0.25	FDP	Al
SH-9WMT	WR975	0.75-1.15	≤20%	≤1.20	≤1.50	≥17	3±0.25	FDP	Al
SH-12WMT	WR770	0.98-1.48	≤20%	≤1.20	≤1.50	≥17	3±0.25	FDP	Al
SH-14WMMT	WR650	1.13-1.73	≤20%	≤1.20	≤1.50	≥17	3±0.25	FDP	Al
SH-18WMT	WR510	1.45-2.20	≤20%	≤1.20	≤1.50	≥17	3±0.25	FDP	Al
SH-22WMT	WR430	1.72-2.61	≤20%	≤1.20	≤1.50	≥17	3±0.4	FDP	Al
SH-26WMT	WR340	2.17-3.30	≤20%	≤1.20	≤1.50	≥17	3±0.4	FDP	Al
SH-32WMT	WR284	2.60-3.95	≤20%	≤1.20	≤1.50	≥17	3±0.4	FDP	Al
SH-40WMT	WR229	3.22-4.90	≤20%	≤1.20	≤1.50	≥17	3±0.4	FDP	Al
SH-48WMT	WR187	3.94-5.99	≤20%	≤1.20	≤1.50	≥17	3±0.4	FDP	Al
SH-58WMT	WR159	4.64-7.05	≤20%	≤1.20	≤1.50	≥17	3±0.4	FDP	Al
SH-70WMT	WR137	5.38-8.17	≤20%	≤1.20	≤1.50	≥17	3±0.4	FDP	Cu
SH-84WMMT	WR112	6.57-9.99	≤20%	≤1.20	≤1.50	≥17	3±0.4	FBP	Cu
SH-100WMT	WR90	8.20-12.40	≤20%	≤1.20	≤1.50	≥17	3±0.4	FBP	Cu
SH-120WMT	WR75	9.84-15.0	≤20%	≤1.20	≤1.50	≥17	3±0.4	FBP	Cu
SH-140WMT	WR62	11.9-18.0	≤20%	≤1.20	≤1.50	≥17	3±0.4	FBP	Cu
SH-180WMT	WR51	14.5-22.0	≤20%	≤1.20	≤1.50	≥17	3±0.4	FBP	Cu
SH-220WMT	WR42	17.6-26.7	≤20%	≤1.20	≤1.50	≥15	3±0.4	FBP	Cu
SH-260WMT	WR34	21.7-33.0	≤20%	≤1.20	≤1.50	≥15	3±0.4	FBP	Cu
SH-320WMT	WR28	26.5-40.0	≤20%	≤1.20	≤1.50	≥15	3±0.4	FBP	Cu
SH-400WMT	WR22	32.9-50.1	≤20%	≤1.20	≤1.50	≥15	3±0.5	FUGP	Cu
SH-500WMT	WR19	39.2-59.6	≤20%	≤1.20	≤1.50	≥15	3±0.5	FUGP	Cu
SH-620WMT	WR15	49.8-75.8	≤20%	≤1.20	≤1.50	≥15	3±0.5	FUGP	Cu
SH-740WMT	WR12	60.5-91.9	≤20%	≤1.20	≤1.50	≥15	3±0.5	FUGP	Cu
SH-900WMT	WR10	73.8-112	≤20%	≤1.20	≤1.50	≥15	3±0.5	FUGP	Cu

Waveguide Power Divider/Combiner

Double-Ridged Waveguide Magic Tee and PowerDivider/ Combiner

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	VSWR		Isolation (E-H) (dB)	Distribution Ratio(dB)	Flange	Material
			H-Arm	E-Arm				
SH-200DRWMTPC/D	WRD200	2.0-4.8	≤1.50	≤1.50	≥12	3±0.6	FP	Al
SH-250DRWMTPC/D	WRD250	2.6-7.8	≤1.50	≤1.50	≥12	3±0.6	FP	Al
SH-350DRWMTPC/D	WRD350	3.5-8.2	≤1.50	≤1.50	≥12	3±0.6	FP	Al
SH-475DRWMTPC/D	WRD475	4.75-11	≤1.50	≤1.50	≥12	3±0.6	FP	Al
SH-500DRWMTPC/D	WRD500	5.0-18.0	≤1.50	≤1.50	≥12	3±0.6	FP	Cu
SH-650DRWMTPC/D	WRD650	6.5-18.0	≤1.50	≤1.50	≥12	3±0.6	FP	Cu
SH-750DRWMTPC/D	WRD750	7.5-18.0	≤1.50	≤1.50	≥12	3±0.6	FP	Cu
SH-700DRWMTPC/D	WRD700	7.0-18.0	≤1.50	≤1.50	≥12	3±0.6	FP	Cu

Waveguide Pressure Window

Waveguide Pressure Window

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	VSWR	Flange	Material
SH-3WPW...PM	WR2300	0.32-0.49	≤1.25	FDP/FDM	Al
SH-4WPW...PM	WR2100	0.35-0.53	≤1.25	FDP/FDM	Al
SH-5WPW... PM	WR1800	0.41-0.62	≤1.25	FDP/FDM	Al
SH-6WPW...PM	WR1500	0.49-0.75	≤1.25	FDP/FDM	Al
SH-8WPW...PM	WR1150	0.64-0.98	≤1.25	FDP/FDM	Al
SH-9WPW...PM	WR975	0.75-1.15	≤1.25	FDP/FDM	Al
SH-12WPW...PM	WR770	0.96-1.46	≤1.25	FDP/FDM	Al
SH-14WPW...PM	WR650	1.13-1.73	≤1.25	FDP/FDM	Al
SH-18WPW...PM	WR510	1.45-2.20	≤1.25	FDP/FDM	Al
SH-22WPW...PM	WR430	1.72-2.61	≤1.25	FDP/FDM	Al
SH-26WPW...PM	WR340	2.17-3.30	≤1.25	FDP/FDM	Al
SH-32WPW...PM	WR284	2.60-3.95	≤1.25	FDP/FDM	Al
SH-40WPW...PM	WR229	3.22-4.90	≤1.25	FDP/FDM	Al
SH-48WPW...PM	WR187	3.94-5.99	≤1.25	FDP/FDM	Al
SH-58WPW...PM	WR159	4.64-7.05	≤1.25	FDP/FDM	Al
SH-70WPW...PM	WR137	5.38-8.17	≤1.25	FDP/FDM	Cu
SH-84WPW...PM	WR112	6.57-9.99	≤1.25	FBP/FBM	Cu
SH-100WPW...PM	WR90	8.20-12.40	≤1.25	FBP/FBM	Cu
SH-120WPW...PM	WR75	9.84-15.0	≤1.25	FBP/FBM	Cu
SH-140WPW...PM	WR62	11.9-18.0	≤1.25	FBP/FBM	Cu
SH-180WPW...PM	WR51	14.5-22.0	≤1.25	FBP/FBM	Cu
SH-220WPW...PM	WR42	17.6-26.7	≤1.25	FBP/FBM	Cu
SH-260WPW...PM	WR34	21.7-33.0	≤1.25	FBP/FBM	Cu
SH-320WPW...PM	WR28	26.5-40.0	≤1.3	FBP/FBM	Cu
SH-400WPW...	WR22	32.9-50.1	≤1.3	FUGP	Cu
SH-500WPW...	WR19	39.2-59.6	≤1.4	FUGP	Cu
SH-620WPW...	WR15	49.8-75.8	≤1.4	FUGP	Cu
SH-740WPW...	WR12	60.5-91.9	≤1.4	FUGP	Cu
SH-900WPW...	Wr10	73.8-112	≤1.4	FUGP	Cu

Waveguide Rotary Joint

I Type Waveguide Rotary Joint

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR	IL (dB)	Avg Power (W)	Peak Power (KW)	Flange	Material
SH-32WRJI	WR284	2.60-3.95	≤15%	≤1.20	≤0.25	600	600	FDP	Al
SH-40WRJI	WR229	3.22-4.90	≤15%	≤1.20	≤0.25	600	600	FDP	Al
SH-48WRJI	WR187	3.94-5.99	≤15%	≤1.20	≤0.25	600	600	FDP	Al
SH-58WRJI	WR159	4.64-7.05	≤15%	≤1.20	≤0.25	500	150	FDP	Al
SH-70WRJI	WR137	5.38-8.17	≤15%	≤1.20	≤0.25	500	150	FDP	Al
SH-84WRJI	WR112	6.57-9.99	≤15%	≤1.20	≤0.3	400	150	FBP	Cu
SH-100WRJI	WR90	8.20-12.5	≤15%	≤1.20	≤0.3	400	150	FBP	Cu
SH-120WRJI	WR75	9.84-15.0	≤15%	≤1.20	≤0.3	200	10	FBP	Cu
SH-140WRJI	WR62	11.9-18.0	≤15%	≤1.20	≤0.3	100	4	FBP	Cu
SH-180WRJI	WR51	14.5-22.0	≤15%	≤1.20	≤0.3	100	3	FBP	Cu
SH-220WRJII	WR42	17.6-26.7	≤15%	≤1.25	≤0.5	50	0.5	FBP	Cu
SH-260WRJI	WR34	21.7-33.0	≤15%	≤1.25	≤0.5	30	0.3	FBP	Cu
SH-320WRJI	WR28	26.5-40.0	≤15%	≤1.25	≤0.5	30	0.3	FBP	Cu

L Type Waveguide Rotary Joint

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR	IL (dB)	Avg Power (W)	Peak Power (KW)	Flange	Material
SH-32WRJL	WR284	2.60-3.95	≤15%	≤1.20	≤0.25	600	600	FDP	Al
SH-40WRJL	WR229	3.22-4.90	≤15%	≤1.20	≤0.25	600	600	FDP	Al
SH-48WRJL	WR187	3.94-5.99	≤15%	≤1.20	≤0.25	600	600	FDP	Al
SH-58WRJL	WR159	4.64-7.05	≤15%	≤1.20	≤0.25	500	150	FDP	Al
SH-70WRJL	WR137	5.38-8.17	≤15%	≤1.20	≤0.25	500	150	FDP	Al
SH-84WRJL	WR112	6.57-9.99	≤15%	≤1.20	≤0.3	400	150	FBP	Cu
SH-100WRJL	WR90	8.20-12.5	≤15%	≤1.20	≤0.3	400	150	FBP	Cu
SH-120WRJL	WR75	9.84-15.0	≤15%	≤1.20	≤0.3	200	10	FBP	Cu
SH-140WRJL	WR62	11.9-18.0	≤15%	≤1.20	≤0.3	100	4	FBP	Cu
SH-180WRJL	WR51	14.5-22.0	≤15%	≤1.25	≤0.3	100	3	FBP	Cu
SH-220WRJL	WR42	17.6-26.7	≤15%	≤1.25	≤0.5	50	0.5	FBP	Cu
SH-260WRJL	WR34	21.7-33.0	≤15%	≤1.25	≤0.5	30	0.3	FBP	Cu
SH-320WRJL	WR28	26.5-40.0	≤15%	≤1.25	≤0.5	30	0.3	FBP	Cu

Waveguide Rotary Joint

U Type Waveguide Rotary Joint

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR	IL (dB)	Avg Power (W)	Peak Power (KW)	Flange	Material
SH-32WRJU	WR284	2.60-3.95	≤15%	≤1.20	≤0.25	600	600	FDP	Al
SH-40WRJU	WR229	3.22-4.90	≤15%	≤1.20	≤0.25	600	600	FDP	Al
SH-48WRJU	WR187	3.94-5.99	≤15%	≤1.20	≤0.25	600	600	FDP	Al
SH-58WRJU	WR159	4.64-7.05	≤15%	≤1.20	≤0.25	500	150	FDP	Al
SH-70WRJU	WR137	5.38-8.17	≤15%	≤1.20	≤0.25	500	150	FDP	Al
SH-84WRJU	WR112	6.57-9.99	≤15%	≤1.20	≤0.3	400	150	FBP	Cu
SH-100WRJU	WR90	8.20-12.5	≤15%	≤1.20	≤0.3	400	150	FBP	Cu
SH-120WRJU	WR75	9.84-15.0	≤15%	≤1.20	≤0.3	200	10	FBP	Cu
SH-140WRJU	WR62	11.9-18.0	≤15%	≤1.20	≤0.3	100	4	FBP	Cu
SH-180WRJU	WR51	14.5-22.0	≤15%	≤1.25	≤0.3	100	3	FBP	Cu
SH-220WRJU	WR42	17.6-26.7	≤15%	≤1.25	≤0.5	50	0.5	FBP	Cu
SH-260WRJU	WR34	21.7-33.0	≤15%	≤1.25	≤0.5	30	0.3	FBP	Cu
SH-320WRJU	WR28	26.5-40.0	≤15%	≤1.25	≤0.5	30	0.3	FBP	Cu

Waveguide Rotary Joint

High Power Waveguide Rotary Joint

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR	IL (dB)	Avg Power (W)	Peak Power (KW)	Flange	Material
SH-32WHPRJUTM01	WR284	2.60–3.95	≤5%	≤1.15	≤0.20	3000	–	FDP	Al
SH-40WHPRJUTM01	WR229	3.22–4.90	≤5%	≤1.15	≤0.20	3000	–	FDP	Al
SH-48WHPRJUTM01	WR187	3.94–5.99	≤5%	≤1.15	≤0.20	3000	–	FDP	Al
SH-58WHPRJUTM01	WR159	4.64–7.05	≤5%	≤1.15	≤0.20	3000	–	FDP	Al
SH-70WHPRJUTM01	WR137	5.38–8.17	≤5%	≤1.15	≤0.20	2000	–	FDP	Al
SH-84WHPRJUTM01	WR112	6.57–9.99	≤5%	≤1.15	≤0.20	2000	–	FBP	Cu
SH-100WHPRJUTM01	WR90	8.20–12.5	≤5%	≤1.15	≤0.20	2000	–	FBP	Cu
SH-120WHPRJUTM01	WR75	9.84–15.0	≤5%	≤1.15	≤0.20	1000	–	FBP	Cu
SH-140WHPRJUTM01	WR62	11.9–18.0	≤5%	≤1.15	≤0.20	2000	–	FBP	Cu
SH-180WHPRJUTM01	WR51	14.5–22.0	≤5%	≤1.15	≤0.25	500	–	FBP	Cu
SH-220WHPRJUTM01	WR42	17.6–26.7	≤5%	≤1.15	≤0.25	500	–	FBP	Cu
SH-260WHPRJUTM01	WR34	21.7–33.0	≤5%	≤1.15	≤0.25	300	–	FBP	Cu
SH-320WHPRJUTM01	WR28	26.5–40.0	≤5%	≤1.15	≤0.25	300	–	FBP	Cu

Waveguide Rotary Joint

High Power Waveguide Rotary Joint

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	VSWR	IL (dB)	Avg Power (W)	Flange	Material
SH-70WRJIT	WR137	5.38-8.17	≤1.25	≤0.3	200	FDP	Cu
SH-84WRJIT	WR112	6.57-9.99	≤1.25	≤0.3	100	FBP	Cu
SH-100WRJIT	WR90	8.20-12.5	≤1.25	≤0.3	100	FBP	Cu
SH-120WRJIT	WR75	9.84-15.0	≤1.25	≤0.3	100	FBP	Cu
SH-140WRJIT	WR62	11.9-18.0	≤1.25	≤0.3	100	FBP	Cu
SH-180WRJIT	WR51	14.5-22.0	≤1.25	≤0.3	50	FBP	Cu
SH-220WRJIT	WR42	17.6-26.7	≤1.4	≤0.3	50	FBP	Cu
SH-260WRJIT	WR34	21.7-33.0	≤1.5	≤0.3	50	FBP	Cu
SH-320WRJIT	WR28	26.5-40.0	≤1.5	≤0.3	50	FBP	Cu

Waveguide Rotary Joint

High Power Waveguide Rotary Joint

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR	IL (dB)	Avg Power (W)	Circular Waveguide Diameter (mm)	Flange	Material	Finish
SH-100CWRJI	2.0-4.0	≤1.20	≤0.2	200	100	FAP	Al	Chromate Conversion
SH-6104CWRJI	3.3-3.8	≤1.20	≤0.2	200	61.04	FAP	Al	Chromate Conversion
SH-51.99CWRJI	3.68-5.33	≤1.20	≤0.2	200	51.99	FAP	Al	Chromate Conversion
SH-37CWRJI	4.5-6.5	≤1.20	≤0.2	200	37	FAP	Al	Chromate Conversion
SH-27.78CWRJI	7.4-9.0	≤1.20	≤0.2	200	27.87	FAP	Al	Chromate Conversion
SH-23.825CWRJI	9.1-10.0	≤1.20	≤0.2	100	23.825	FAP	Al	Chromate Conversion
SH-20.244CWRJI	8.5-10.5	≤1.20	≤0.2	100	20.244	FAP	Al	Chromate Conversion
SH-14CWRJI	15.0-17.0	≤1.20	≤0.2	100	14	FAP	Cu	Silver Plating
SH-1125CWRJI	18.2-24.9	≤1.20	≤0.2	100	11.25	FAP	Cu	Silver Plating
SH-11CWRJI	17.7-21.2	≤1.20	≤0.2	100	11	FAP	Cu	Silver Plating
SH-7.137CWRJI	27.5-31	≤1.20	≤0.2	100	7.137	FAP	Cu	Silver Plating

Waveguide Rotary Joint

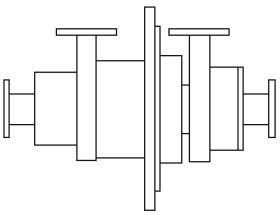
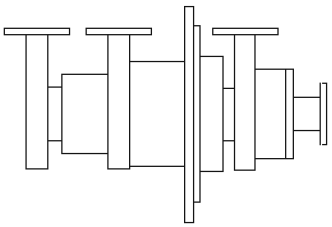
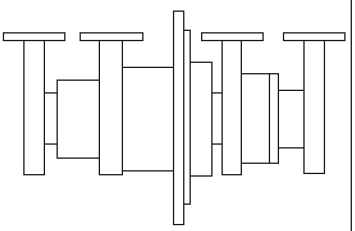
Double-Ridged Waveguide Rotary Joint

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	VSWR	IL(dB)	Avg Power (W)	Flange	Material
SH-84DRWRJI	WRD84	0.84-2	≤1.5	≤0.5	200	FP	Cu
SH-150DRWRJI	WRD150	1.5-3.6	≤1.5	≤0.5	200	FP	Cu
SH-200DRWRJI	WRD200	2-4.8	≤1.5	≤0.5	200	FP	Cu
SH-250DRWRJI	WRD250	2.6-7.8	≤1.5	≤0.5	200	FP	Cu
SH-350DRWRJI	WRD350	3.5-8.2	≤1.5	≤0.5	200	FP	Cu
SH-475DRWRJI	WRD475	4.75-11	≤1.5	≤0.5	100	FP	Cu
SH-500DRWRJI	WRD500	5-18	≤1.5	≤0.5	100	FP	Cu
SH-580DRWRJI	WRD580	5.8-16	≤1.5	≤0.5	100	FP	Cu
SH-650DRWRJI	WRD650	6.5-18	≤1.5	≤0.5	100	FP	Cu
SH-700DRWRJI	WRD750	7-18.5	≤1.5	≤0.5	100	FP	Cu
SH-750DRWRJI	WRD700	7.5-18	≤1.5	≤0.5	100	FP	Cu
SH-1100DRWRJI	WRD110	11-26.5	≤1.8	≤0.8	50	FP	Cu
SH-1800DRWRJI	WRD180	18-40	≤2.0	≤0.8	30	FP	Cu

Waveguide Rotary Joint

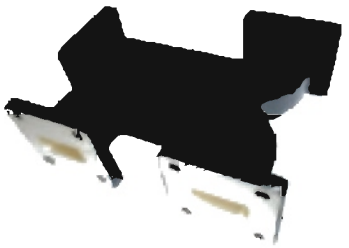
Waveguide Dual–Channel Rotary Joint

Model	UI	UL	UU
Description	Dual–Channel U+I Type	Dual–Channel U+L Type	Dual–Channel U+U Type
Drawing			
Channel Isolation	≥50dB	≥50dB	≥50dB

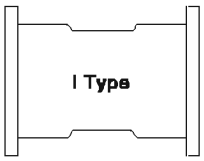
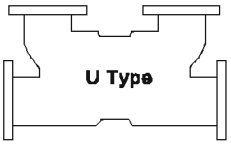
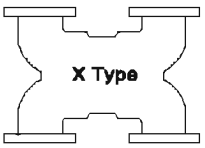
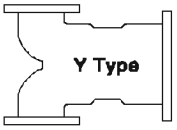
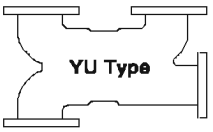
ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR	IL (dB)	Avg Power (W)	Peak Power (KW)	Flange	Material
SH–32WRJUI	WR284	2.60–3.95	≤10%	≤1.25	≤0.3	600	600	FDP	Al
SH–40WRJUI	WR229	3.22–4.90	≤10%	≤1.25	≤0.3	600	600	FDP	Al
SH–48WRJUI	WR187	3.94–5.99	≤10%	≤1.25	≤0.3	600	600	FDP	Al
SH–58WRJUI	WR159	4.64–7.05	≤10%	≤1.25	≤0.3	500	150	FDP	Al
SH–70WRJUI	WR137	5.38–8.17	≤10%	≤1.25	≤0.3	500	150	FDP	Cu
SH–84WRJUI	WR112	6.57–9.99	≤10%	≤1.25	≤0.3	400	150	FBP	Cu
SH–100WRJUI	WR90	8.20–12.5	≤10%	≤1.25	≤0.3	400	150	FBP	Cu
SH–120WRJUI	WR75	9.84–15.0	≤10%	≤1.25	≤0.3	100	10	FBP	Cu
SH–140WRJUI	WR62	11.9–18.0	≤10%	≤1.25	≤0.3	100	4	FBP	Cu
SH–180WRJUI	WR51	14.5–22.0	≤10%	≤1.25	≤0.3	100	3	FBP	Cu
SH–220WRJUI	WR42	17.6–26.7	≤10%	≤1.25	≤0.3	50	0.5	FBP	Cu
SH–260WRJUI	WR34	21.7–33.0	≤10%	≤1.25	≤0.3	30	0.3	FBP	Cu
SH–320WRJUI	WR28	26.5–40.0	≤10%	≤1.25	≤0.3	30	0.3	FBP	Cu

Waveguide Rotary Joint



Waveguide 90° Power Divider/Combiner

Model	I Type		U Type		X Type		Y Type		YU Type	
	WSWC	WTWC	WSWUC	WTWUC	WSWXC	WTWXC	WSWYC	WTWYC	WSWYUC	WTWYUC
Description	Narrow wall coupling	Wide wall coupling	Narrow wall coupling	Wide wall coupling	Narrow wall coupling	Wide wall coupling	Narrow wall coupling	Wide wall coupling	Narrow wall coupling	Wide wall coupling
Product Image										

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR	Coupling (dB)	Material
SH-40WSWC...	WR229	3.22-4.90	≤10%	≤1.25	3-7	Al
SH-40WTWC...	WR229	3.22-4.90	≤10%	≤1.25	3-7	Al
SH-46WSWC..	WR187	3.94-5.99	≤10%	≤1.25	3-7	Al
SH-46WTWC...	WR187	3.94-5.99	≤10%	≤1.25	3-7	Al
SH-58WSWC...	WR159	4.64-7.05	≤10%	≤1.25	3-7	Al
SH-58WTWC...	WR159	4.64-7.05	≤10%	≤1.25	3-7	Al
SH-70WSWC...	WR137	5.38-8.17	≤10%	≤1.25	3-7	Cu
SH-70WTWC...	WR137	5.38-8.17	≤10%	≤1.25	3-7	Cu
SH-84WSWC...	WR112	6.57-9.99	≤10%	≤1.25	3-7	Cu
SH-84WTWC...	WR112	6.57-9.99	≤10%	≤1.25	3-7	Cu
SH-100WSWC...	WR90	8.20-12.40	≤10%	≤1.25	3-7	Cu
SH-100WTWC...	WR90	8.20-12.40	≤10%	≤1.25	3-7	Cu
SH-120WSWC...	WR75	9.84-15.0	≤10%	≤1.25	3-7	Cu
SH-120WTWC...	WR75	9.84-15.0	≤10%	≤1.25	3-7	Cu
SH-140WSWC...	WR62	11.9-18.0	≤10%	≤1.25	3-7	Cu
SH-140WTWC...	WR62	11.9-18.0	≤10%	≤1.25	3-7	Cu
SH-180WSWC...	WR51	14.5-22.0	≤10%	≤1.25	3-7	Cu
SH-180WTWC...	WR51	14.5-22.0	≤10%	≤1.25	3-7	Cu
SH-220WSWC...	WR42	17.6-26.7	≤10%	≤1.30	3-7	Cu
SH-220WTWC...	WR42	17.6-26.7	≤10%	≤1.30	3-7	Cu
SH-260WSWC..	WR34	21.7-33.0	≤10%	≤1.30	3-7	Cu
SH-260WTWC...	WR34	21.7-33.0	≤10%	≤1.30	3-7	Cu
SH-320WSWC...	WR28	26.5-40.0	≤10%	≤1.30	3-7	Cu
SH-320WTWC...	WR28	26.5-40.0	≤10%	≤1.30	3-7	Cu

WAVEGUIDE ROTARY JOINT

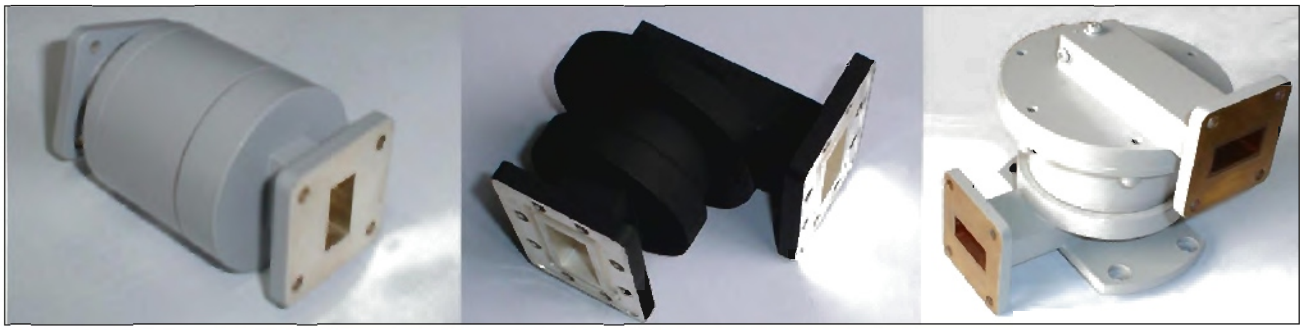
Waveguide Single Channel Rotary Joint

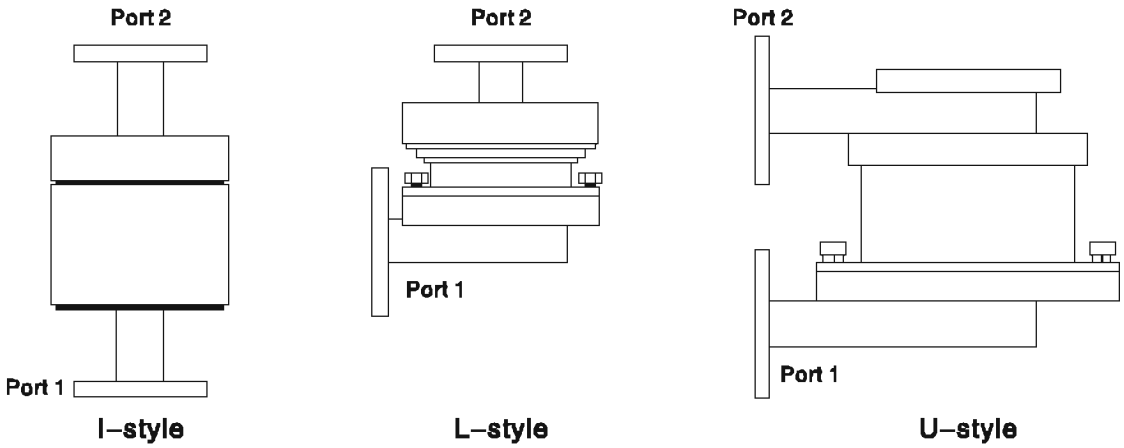
Rotary Joints (rotary couplers) are used to transmit microwave energy from stationary lines to rotating lines. The rotary joint is an electro–mechanical device with RF performance dependent upon rigorous electrical and mechanical design. Available styles are defined by physical geometry as follows:

I–style – Two in–line arms both collinear with the axis of rotation.

L–style – One arm is perpendicular to the axis of rotation.

U–style – Both arms are perpendicular to the axis of rotation.





Ordering Information

Example Part No: SH – 100 WRJL P M A

- SH – Shinhom Microwave
- 100 – WG type:R100
- WRJL – Product Type: Rotary Joint (WRJI(I–style) WRJL(L–style) WRJU(U–style))
- P – Port 1 Flange Type: FBP
- M – Port 2 Flange Type: FBM
- A – Material : A=Aluminum C=Copper

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

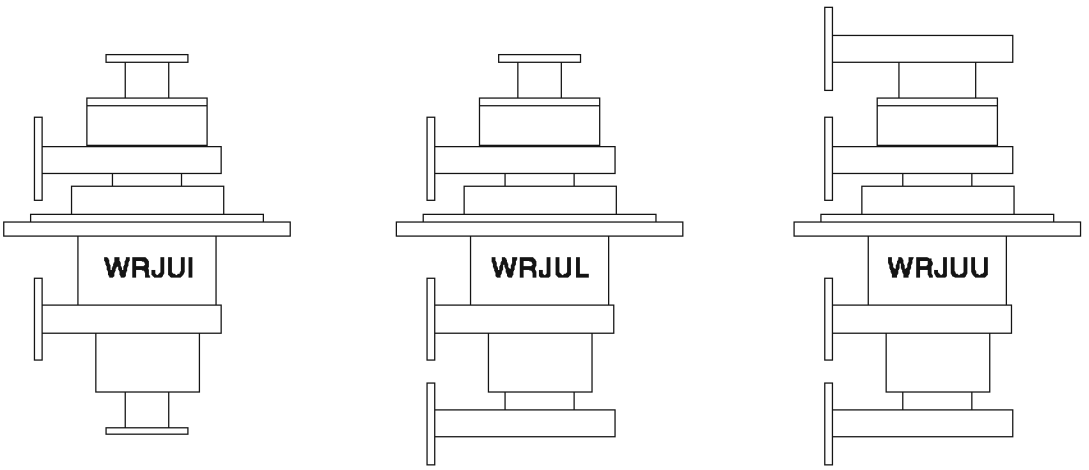
ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Operating Bandwidth (MHz)	VSWR (Max)	VSWR WOW	IL(dB) (Max)	IL WOW (dB)	WG type		Material
							IEC	EIA	
SH-32WRJI	2.60-3.95	200	1.20	0.05	0.3	0.10	R32	WR284	Al/Cu
SH-32WRJL	2.60-3.95	200	1.20	0.05	0.3	0.10	R32	WR284	Al/Cu
SH-32WRJU	2.60-3.95	200	1.20	0.05	0.3	0.10	R32	WR284	Al/Cu
SH-40WRJI	3.22-4.90	200	1.20	0.05	0.3	0.10	R40	WR229	Al/Cu
SH-40WRJL	3.22-4.90	200	1.20	0.05	0.3	0.10	R40	WR229	Al/Cu
SH-40WRJU	3.22-4.90	200	1.20	0.05	0.3	0.10	R40	WR229	Al/Cu
SH-48WRJI	3.94-5.99	200	1.20	0.05	0.3	0.10	R48	WR187	Al/Cu
SH-48WRJL	3.94-5.99	200	1.20	0.05	0.3	0.10	R48	WR187	Al/Cu
SH-48WRJU	3.94-5.99	200	1.20	0.05	0.3	0.10	R48	WR187	Al/Cu
SH-58WRJI	4.64-7.05	300	1.25	0.05	0.25	0.10	R58	WR159	Al/Cu
SH-58WRJL	4.64-7.05	300	1.25	0.05	0.25	0.10	R58	WR159	Al/Cu
SH-58WRJU	4.64-7.05	300	1.25	0.05	0.25	0.10	R58	WR159	Al/Cu
SH-70WRJI	5.38-8.17	700	1.25	0.05	0.25	0.10	R70	WR137	Al/Cu
SH-70WRJL	5.38-8.17	700	1.25	0.05	0.25	0.10	R70	WR137	Al/Cu
SH-70WRJU	5.38-8.17	700	1.25	0.05	0.25	0.10	R70	WR137	Al/Cu
SH-84WRJI	6.57-9.99	300	1.20	0.05	0.3	0.10	R84	WR112	Al/Cu
SH-84WRJL	6.57-9.99	300	1.20	0.05	0.3	0.10	R84	WR112	Al/Cu
SH-84WRJU	6.57-9.99	300	1.20	0.05	0.3	0.10	R84	WR112	Al/Cu
SH-100WRJI	8.20-12.4	300	1.20	0.05	0.3	0.10	R100	WR90	Al/Cu
SH-100WRJL	8.20-12.4	300	1.20	0.05	0.3	0.10	R100	WR90	Al/Cu
SH-100WRJU	8.20-12.4	300	1.20	0.05	0.3	0.10	R100	WR90	Al/Cu
SH-120WRJI	9.84-15.0	500	1.25	0.05	0.3	0.10	R120	WR75	Al/Cu
SH-120WRJL	9.84-15.0	500	1.25	0.05	0.3	0.10	R120	WR75	Al/Cu
SH-120WRJU	9.84-15.0	500	1.25	0.05	0.3	0.10	R120	WR75	Al/Cu
SH-140WRJI	11.9-18.0	1000	1.3	0.05	0.4	0.10	R140	WR62	Al/Cu
SH-140WRJL	11.9-18.0	1000	1.3	0.05	0.4	0.10	R140	WR62	Al/Cu
SH-140WRJU	11.9-18.0	1000	1.3	0.05	0.4	0.10	R140	WR62	Al/Cu
SH-180WRJI	14.5-22.0	1000	1.3	0.05	0.4	0.10	R180	WR51	Al/Cu
SH-180WRJL	14.5-22.0	1000	1.3	0.05	0.4	0.10	R180	WR51	Al/Cu
SH-180WRJU	14.5-22.0	1000	1.3	0.05	0.4	0.10	R180	WR51	Al/Cu
SH-220WRJI	17.6-26.7	2000	1.4	0.05	1.0	0.10	R220	WR42	Al/Cu
SH-220WRJL	17.6-26.7	2000	1.4	0.05	1.0	0.10	R220	WR42	Al/Cu
SH-220WRJU	17.6-26.7	2000	1.4	0.05	1.0	0.10	R220	WR42	Al/Cu
SH-260WRJI	21.7-33.0	2000	1.4	0.05	1.0	0.10	R260	WR34	Al/Cu
SH-260WRJL	21.7-33.0	2000	1.4	0.05	1.0	0.10	R260	WR34	Al/Cu
SH-260WRJU	21.7-33.0	2000	1.4	0.05	1.0	0.10	R260	WR34	Al/Cu
SH-320WRJI	26.3-40.0	2000	1.4	0.05	1.0	0.10	R320	WR28	Al/Cu
SH-320WRJL	26.3-40.0	2000	1.4	0.05	1.0	0.10	R320	WR28	Al/Cu
SH-320WRJU	26.3-40.0	2000	1.4	0.05	1.0	0.10	R320	WR28	Al/Cu

WAVEGUIDE ROTARY JOINT

Waveguide Double Channel Rotary Joint

Shinhom Microwave offers a standard product line of Rotary Joints covering waveguide sizes WR28 thru WR284.Rotary Joints (rotary couplers) are used to transmit microwave energy from stationary lines to rotating lines. The rotary joint is an electro–mechanical device with RF performance dependent upon rigorous electrical and mechanical design. Available styles are defined by physical geometry as follows:



Ordering Information

Example Part No: SH – 100 WRJUL A

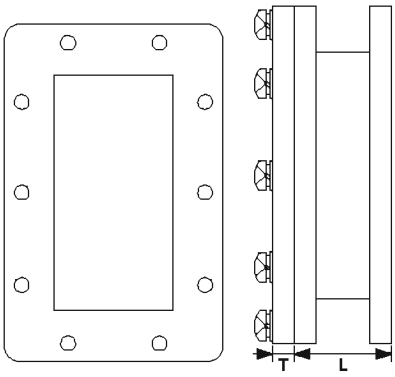
- SH – Shinhom Microwave
- 100 – WG type:R100
- WRJUL – Product Type: Rotary Joint
- A – Material : A=Aluminum C=Copper

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Operating Bandwidth (MHz)	VSWR (Max)	VSWR WOW	IL(dB) (Max)	IL WOW (dB)	Max.ISO (dB)in two channels	WG type		Material
								IEC	EIA	
SH-32WRJUI	2.60-3.95	60	1.30	0.10	0.6	0.10	50	R32	WR284	Al/Cu
SH-32WRJUL	2.60-3.95	100	1.30	0.10	0.3	0.10	50	R32	WR284	Al/Cu
SH-32WRJUU	2.60-3.95	100	1.30	0.10	0.3	0.10	50	R32	WR284	Al/Cu
SH-40WRJUI	3.22-4.90	100	1.30	0.10	0.3	0.10	50	R40	WR229	Al/Cu
SH-40WRJUL	3.22-4.90	100	1.30	0.10	0.3	0.10	50	R40	WR229	Al/Cu
SH-40WRJUU	3.22-4.90	100	1.30	0.10	0.3	0.10	50	R40	WR229	Al/Cu
SH-48WRJUI	3.94-5.99	100	1.30	0.10	0.3	0.10	50	R48	WR187	Al/Cu
SH-48WRJUL	3.94-5.99	100	1.30	0.10	0.3	0.10	50	R48	WR187	Al/Cu
SH-48WRJUU	3.94-5.99	100	1.30	0.10	0.3	0.10	50	R48	WR187	Al/Cu
SH-58WRJUI	4.64-7.05	100	1.30	0.10	0.25	0.10	50	R58	WR159	Al/Cu
SH-58WRJUL	4.64-7.05	100	1.30	0.10	0.25	0.10	50	R58	WR159	Al/Cu
SH-58WRJUU	4.64-7.05	100	1.30	0.10	0.25	0.10	50	R58	WR159	Al/Cu
SH-70WRJUI	5.38-8.17	100	1.30	0.10	0.25	0.10	50	R70	WR137	Al/Cu
SH-70WRJUL	5.38-8.17	100	1.30	0.10	0.25	0.10	50	R70	WR137	Al/Cu
SH-70WRJUU	5.38-8.17	100	1.30	0.10	0.25	0.10	50	R70	WR137	Al/Cu
SH-84WRJUI	6.57-9.99	100	1.30	0.10	0.3	0.10	50	R84	WR112	Al/Cu
SH-84WRJUL	6.57-9.99	100	1.30	0.10	0.3	0.10	50	R84	WR112	Al/Cu
SH-84WRJUU	6.57-9.99	100	1.30	0.10	0.3	0.10	50	R84	WR112	Al/Cu
SH-100WRJUI	8.20-12.4	100	1.30	0.10	0.3	0.10	50	R100	WR90	Al/Cu
SH-100WRJUL	8.20-12.4	100	1.30	0.10	0.3	0.10	50	R100	WR90	Al/Cu
SH-100WRJUU	8.20-12.4	100	1.30	0.10	0.3	0.10	50	R100	WR90	Al/Cu
SH-120WRJUI	9.84-15.0	200	1.30	0.10	0.3	0.10	50	R120	WR75	Al/Cu
SH-120WRJUL	9.84-15.0	200	1.30	0.10	0.3	0.10	50	R120	WR75	Al/Cu
SH-120WRJUU	9.84-15.0	200	1.30	0.10	0.3	0.10	50	R120	WR75	Al/Cu
SH-140WRJUI	11.9-18.0	200	1.40	0.10	0.4	0.10	50	R140	WR62	Al/Cu
SH-140WRJUL	11.9-18.0	200	1.40	0.10	0.4	0.10	50	R140	WR62	Al/Cu
SH-140WRJUU	11.9-18.0	200	1.40	0.10	0.4	0.10	50	R140	WR62	Al/Cu
SH-180WRJUI	14.5-22.0	200	1.40	0.10	0.4	0.10	50	R180	WR51	Al/Cu
SH-180WRJUL	14.5-22.0	200	1.40	0.10	0.4	0.10	50	R180	WR51	Al/Cu
SH-180WRJUU	14.5-22.0	200	1.40	0.10	0.4	0.10	50	R180	WR51	Al/Cu
SH-220WRJUI	17.6-26.7	200	1.50	0.10	1.0	0.10	50	R220	WR42	Al/Cu
SH-220WRJUL	17.6-26.7	200	1.50	0.10	1.0	0.10	50	R220	WR42	Al/Cu
SH-220WRJUU	17.6-26.7	200	1.50	0.10	1.0	0.10	50	R220	WR42	Al/Cu
SH-260WRJUI	21.7-33.0	200	1.50	0.10	1.0	0.10	50	R260	WR34	Al/Cu
SH-260WRJUL	21.7-33.0	200	1.50	0.10	1.0	0.10	50	R260	WR34	Al/Cu
SH-260WRJUU	21.7-33.0	200	1.50	0.10	1.0	0.10	50	R260	WR34	Al/Cu
SH-320WRJUI	26.3-40.0	200	1.50	0.10	1.0	0.10	50	R320	WR28	Al/Cu
SH-320WRJUL	26.3-40.0	200	1.50	0.10	1.0	0.10	50	R320	WR28	Al/Cu
SH-320WRJUU	26.3-40.0	200	1.50	0.10	1.0	0.10	50	R320	WR28	Al/Cu

Waveguide Offset Short

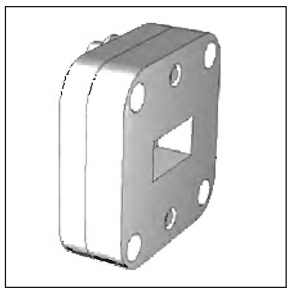


ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	VSWR	Dimension(mm)		Flange	Material
				T	L		
SH-3WOFS	WR2300	0.32-0.49	≥50	23	239.5	FDP	Al
SH-4WOFS	WR2100	0.35-0.53	≥50	23	221.6	FDP	Al
SH-5WOFS	WR1800	0.41-0.62	≥50	18	188.9	FDP	Al
SH-6WOFS	WR1500	0.49-0.75	≥50	18	156.6	FDP	Al
SH-8WOFS	WR1150	0.64-0.98	≥50	14	122.3	FDP	Al
SH-9WOFS	WR975	0.75-1.15	≥50	14	101.6	FDP	Al
SH-12WOFS	WR770	0.96-1.46	≥50	12	81.1	FDP	Al
SH-14WOFS	WR650	1.13-1.73	≥50	12	67.9	FDP	Al
SH-18WOFS	WR510	1.45-2.20	≥50	12	53.2	FDP	Al
SH-22WOFS	WR430	1.72-2.61	≥50	10	44.8	FDP	Al
SH-26WOFS	WR340	2.17-3.30	≥50	10	35.5	FDP	Al
SH-32WOFS	WR284	2.60-3.95	≥50	8	29.6	FDP	Al
SH-40WOFS	WR229	3.22-4.90	≥50	8	23.9	FDP	Al
SH-48WOFS	WR187	3.94-5.99	≥50	7	19.6	FDP	Al
SH-58WOFS	WR159	4.64-7.05	≥50	7	16.6	FDP	Al
SH-70WOFS	WR137	5.38-8.17	≥50	7	14.3	FDP	Cu
SH-84WOFS	WR112	6.57-9.99	≥50	5	11.7	FBP	Cu
SH-100WOFS	WR90	8.20-12.40	≥50	5	9.5	FBP	Cu
SH-120WOFS	WR75	9.84-15.0	≥50	5	7.8	FBP	Cu
SH-140WOFS	WR62	11.9-18.0	≥50	5	6.5	FBP	Cu
SH-180WOFS	WR51	14.5-22.0	≥50	5	5.3	FBP	Cu
SH-220WOFS	WR42	17.6-26.7	≥50	4	4.4	FBP	Cu
SH-260WOFS	WR34	21.7-33.0	≥50	4	3.55	FBP	Cu
SH-320WOFS	WR28	26.5-40.0	≥50	4	2.9	FBP	Cu
SH-400WOFS	WR22	32.9-50.1	≥50	4	2.3	FUGP	Cu
SH-500WOFS	WR19	39.2-59.6	≥50	4	1.97	FUGP	Cu
SH-620WOFS	WR15	49.8-75.8	≥50	4	1.55	FUGP	Cu
SH-740WOFS	WR12	60.5-91.9	≥50	4	1.3	FUGP	Cu
SH-900WOFS	WR10	73.8-112	≥50	4	1.05	FUGP	Cu

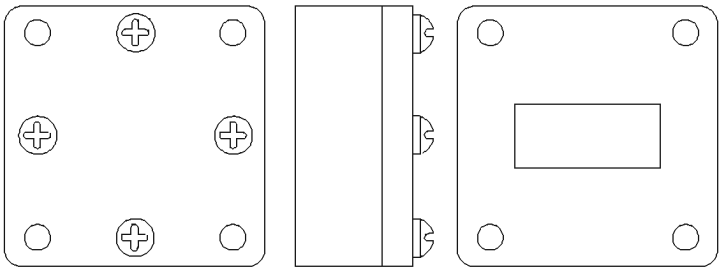
Note: L value is according to waveguide center frequency

WAVEGUIDE SHORT



Waveguide Offset Short

Waveguide offset shorts are available on special order. These are designed to have a specific shorting distance as required.



WAVEGUIDE SHORT PLATE

Waveguide Short Plate

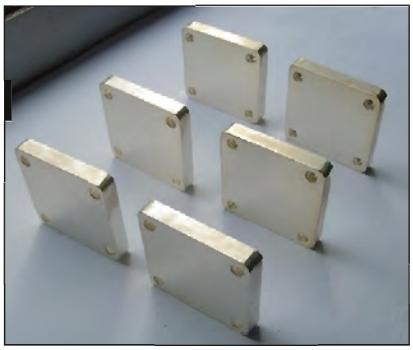
ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	VSWR	Standard Thickness (mm)	Flange	Materlal
SH-3WS	WR2300	0.32-0.49	≥60	23	FDP	Al
SH-4WS	WR2100	0.35-0.53	≥60	23	FDP	Al
SH-5WS	WR1800	0.41-0.62	≥60	18	FDP	Al
SH-6WS	WR1500	0.49-0.75	≥60	18	FDP	Al
SH-8WS	WR1150	0.64-0.98	≥60	14	FDP	Al
SH-9WS	WR975	0.75-1.15	≥60	14	FDP	Al
SH-12WS	WR770	0.96-1.46	≥60	12	FDP	Al
SH-14WS	WR650	1.13-1.73	≥60	12	FDP	Al
SH-18WS	WR510	1.45-2.20	≥60	12	FDP	Al
SH-22WS	WR430	1.72-2.61	≥60	10	FDP	Al
SH-26WS	WR340	2.17-3.30	≥60	10	FDP	Al
SH-32WS	WR284	2.60-3.95	≥60	8	FDP	Al
SH-40WS	WR229	3.22-4.90	≥60	8	FDP	Al
SH-48WS	WR187	3.94-5.99	≥60	7	FDP	Al
SH-58WS	WR159	4.64-7.05	≥60	7	FDP	Al
SH-70WS	WR137	5.38-8.17	≥60	7	FDP	Cu
SH-84WS	WR112	6.57-9.99	≥60	5	FBP	Cu
SH-100WS	WR90	8.20-12.40	≥60	5	FBP	Cu
SH-120WS	WR75	9.84-15.0	≥60	5	FBP	Cu
SH-140WS	WR62	11.9-18.0	≥60	5	FBP	Cu
SH-180WS	WR51	14.5-22.0	≥60	5	FBP	Cu
SH-220WS	WR42	17.6-26.7	≥60	4	FBP	Cu
SH-260WS	WR34	21.7-33.0	≥60	4	FBP	Cu
SH-320WS	WR28	26.5-40.0	≥60	4	FBP	Cu
SH-400WS	WR22	32.9-50.1	≥60	4	FUGP	Cu
SH-500WS	WR19	39.2-59.6	≥60	4	FUGP	Cu
SH-620WS	WR15	49.8-75.8	≥60	4	FUGP	Cu
SH-740WS	WR12	60.5-91.9	≥60	4	FUGP	Cu
SH-900WS	WR10	73.8-112	≥60	4	FUGP	Cu

WAVEGUIDE SHORT

Waveguide Short Plate

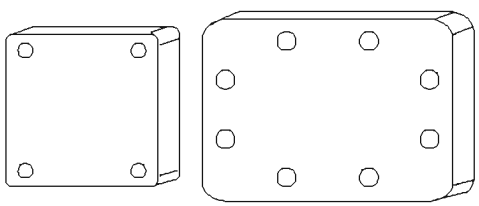
Shinhom Microwave offers a standard product line of waveguide short plates which provide high reflection short circuits for terminating all standard waveguides. Shinhom Microwave offers a cover, all-clear configuration as a standard product. Alternate materials and configurations are available upon request.



ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR (Min)	Thickness (mm)	WG Type		Flange	Material
				IEC	EIA		
SH-3WS...	0.32-0.49	60	23	R3	WR2300	FDP	Al
SH-4WS...	0.35-0.53	60	23	R4	WR2100	FDP	Al
SH-5WS...	0.41-0.62	60	16	R5	WR1800	FDP	Al
SH-6WS...	0.49-0.75	60	16	R6	WR1500	FDP	Al
SH-8WS...	0.64-0.98	60	14	R8	WR1150	FDP	Al
SH-9WS...	0.75-1.15	60	14	R9	WR975	FDP	Al
SH-12WS...	0.96-1.46	60	12	R12	WR770	FDP	Al
SH-14WS...	1.13-1.73	60	12	R14	WR650	FDP	Al
SH-18WS...	1.45-2.20	60	12	R18	WR510	FDP	AlCu
SH-22WS...	1.72-2.61	60	10	R22	WR430	FDP	AlCu
SH-26WS...	2.17-3.30	60	10	R26	WR340	FDP	AlCu
SH-32WS...	2.60-3.95	60	8	R32	WR284	FDP	AlCu
SH-40WS...	3.22-4.90	60	8	R40	WR229	FDP	AlCu
SH-48WS...	3.94 5.99	60	7	R48	WR187	FDP	AlCu
SH-58WS...	4.64-7.05	60	7	R58	WR159	FDP	AlCu
SH-70WS...	5.38-8.17	60	7	R70	WR137	FDP	AlCu
SH-84WS...	6.57-9.99	60	5	R84	WR112	FBP	AlCu
SH-100WS...	8.20-12.40	60	5	R100	WR90	FBP	AlCu
SH-120WS...	9.84-15.0	60	5	R120	WR75	FBP	AlCu
SH-140WS...	11.9-18.0	60	5	R140	WR62	FBP	AlCu
SH-180WS...	14.5-22.0	60	5	R180	WR51	FBP	AlCu
SH-220WS...	17.6-26.7	60	4	R220	WR42	FBP	AlCu
SH-260WS...	21.7-33.0	60	4	R260	WR34	FBP	AlCu
SH-320WS...	26.3-40.0	60	4	R320	WR28	FBP	AlCu
SH-400WS...	32.9-50.1	60	4	R400	WR22	FUGP	Cu
SH-500WS...	39.2-59.6	60	4	R500	WR19	FUGP	Cu
SH-620WS...	49.6-75.8	60	4	R620	WR15	FUGP	Cu
SH-740WS...	60.5-91.9	60	4	R740	WR12	FUGP	Cu
SH-900WS...	73.8-112	60	4	R900	WR10	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.



Ordering Information

Example Part No: SH - 100 WS A

- SH: Shinhom Microwave
- 100: WG type:R100
- WS: Product Type:Waveguide Short
- A: Material : A=Aluminum, C=Copper

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

WAVEGUIDE SHORT PLATE

Waveguide Sliding Short

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	VSWR	Sliding Distance (mm)	Flange	Material
SH-3WSS	WR2300	0.32-0.49	≥50	300	FDP	Al
SH-4WSS	WR2100	0.35-0.53	≥50	240	FDP	Al
SH-5WSS	WR1800	0.41-0.62	≥50	220	FDP	Al
SH-6WSS	WR1500	0.49-0.75	≥50	180	FDP	Al
SH-8WSS	WR1150	0.64-0.98	≥50	150	FDP	Al
SH-9WSS	WR975	0.75-1.15	≥50	130	FDP	Al
SH-12WSS	WR770	0.96-1.46	≥50	100	FDP	Al
SH-14WSS	WR650	1.13-1.73	≥50	90	FDP	Al
SH-18WSS	WR510	1.45-2.20	≥50	80	FDP	Al
SH-22WSS	WR430	1.72-2.61	≥50	70	FDP	Al
SH-26WSS	WR340	2.17-3.30	≥50	60	FDP	Al
SH-32WSS	WR284	2.60-3.95	≥50	60	FDP	Al
SH-40WSS	WR229	3.22-4.90	≥50	50	FDP	Al
SH-48WSS	WR187	3.94-5.99	≥50	50	FDP	Al
SH-58WSS	WR159	4.64-7.05	≥50	50	FDP	Al
SH-70WSS	WR137	5.38-8.17	≥50	40	FDP	Cu
SH-84WSS	WR112	6.57-9.99	≥50	40	FBP	Cu
SH-100WSS	WR90	8.20-12.40	≥50	30	FBP	Cu
SH-120WSS	WR75	9.84-15.0	≥50	30	FBP	Cu
SH-140WSS	WR62	11.9-18.0	≥50	25	FBP	Cu
SH-180WSS	WR51	14.5-22.0	≥50	20	FBP	Cu
SH-220WSS	WR42	17.6-26.7	≥50	20	FBP	Cu
SH-260WSS	WR34	21.7-33.0	≥50	10	FBP	Cu
SH-320WSS	WR28	26.5-40.0	≥50	10	FBP	Cu
SH-400WSS	WR22	32.9-50.1	≥50	10	FUGP	Cu
SH-500WSS	WR19	39.2-59.6	≥50	10	FUGP	Cu
SH-620WSS	WR15	49.8-75.8	≥50	10	FUGP	Cu
SH-740WSS	WR12	60.5-91.9	≥50	10	FUGP	Cu
SH-900WSS	WR10	73.8-112	≥50	10	FUGP	Cu

WAVEGUIDE SHORT

Waveguide Sliding Short

Waveguide sliding shorts are available. Please consult sales engineer for more information.

WAVEGUIDE TEE

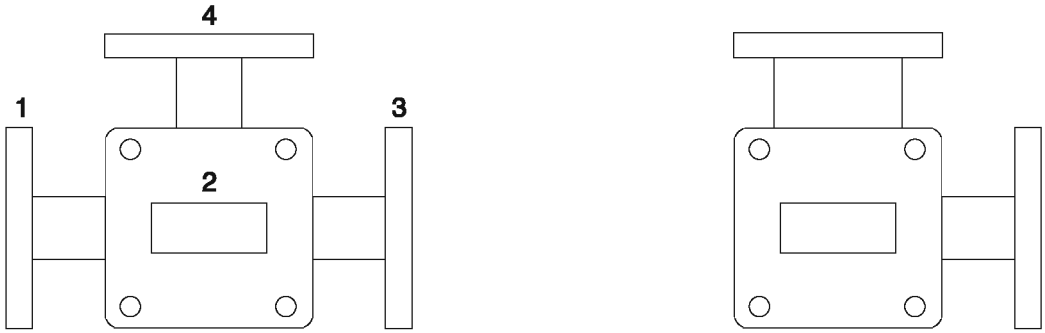
Shinhom Microwave's Magic Hybrid Tee is four– port coupler for matching, balance and isolation. E–plane to H–plane isolation is a function of the symmetry which is carefully balanced on each unit. If the E–plane port 4 or the H–plane port 2 are used as inputs the split is on the output collinear ports 1 and 3. When the input is E plane port 4 the outputs are out of phase 180 deg. When the input is H plane port 2 the outputs are in phase. The in–phase and equal amplitude signals inputting into two collinear ports can result combined signals at H–plane port and cancled signal at E–plane port. This feature is widely used in monopulse antenna feed structure and phasing testing setup

Magic Hybrid Tee

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Operating Bandwidth (%)	VSWR(Max)		Isolation (H&E–Arms) (dB)	Unbalance (Max) (dB)	WG type		Flange	Material
			H–Arm	E–Arm			IEC	EIA		
SH–3WMT...	0.32–0.49	10–15	1.30	1.50	35	±0.25	R3	WR2300	FDP/FDM	Al
SH–4WMT...	0.35–0.53	10–15	1.30	1.50	35	±0.25	R4	WR2100	FDP/FDM	Al
SH–5WMT...	0.41–0.62	10–15	1.30	1.50	35	±0.25	R5	WR1800	FDP/FDM	Al
SH–6WMT...	0.49–0.75	10–15	1.30	1.50	35	±0.25	R6	WR1500	FDP/FDM	Al
SH–8WMT...	0.64–0.98	10–15	1.30	1.50	35	±0.25	R8	WR1150	FDP/FDM	Al
SH–9WMT...	0.75–1.15	10–15	1.30	1.50	35	±0.25	R9	WR975	FDP/FDM	Al
SH–12WMT...	0.96–1.46	10–15	1.20	1.50	35	±0.25	R12	WR770	FDP/FDM	Al
SH–14WMT...	1.13–1.73	10–15	1.20	1.50	35	±0.25	R14	WR650	FDP/FDM	Al
SH–18WMT...	1.45–2.20	10–15	1.20	1.50	35	±0.25	R18	WR510	FDP/FDM	Al
SH–22WMT...	1.72–2.61	10–15	1.30	1.50	35	±0.4	R22	WR430	FDP/FDM	Al/Cu
SH–26WMT...	2.17–3.30	10–15	1.30	1.50	35	±0.4	R26	WR340	FDP/FDM	Al/Cu
SH–32WMT...	2.60–3.95	10–15	1.30	1.50	35	±0.4	R32	WR284	FDP/FDM	Al/Cu
SH–40WMT...	3.22–4.90	10–15	1.20	1.30	35	±0.4	R40	WR229	FDP/FDM	Al/Cu
SH–48WMT...	3.94–5.99	10–15	1.20	1.30	35	±0.4	R48	WR187	FDP/FDM	Al/Cu
SH–58WMT...	4.64–7.05	10–15	1.20	1.30	35	±0.4	R58	WR159	FDP/FDM	Al/Cu
SH–70WMT...	5.38–8.17	10–15	1.20	1.30	35	±0.4	R70	WR137	FDP/FDM	Al/Cu
SH–84WMT...	6.57–9.99	10–15	1.20	1.30	35	±0.4	R84	WR112	FBP/FBM/FBE	Al/Cu
SH–100WMT...	8.20–12.4	10–15	1.20	1.30	35	±0.4	R100	WR90	FBP/FBM/FBE	Al/Cu
SH–120WMT...	9.84–15.0	10–15	1.20	1.30	35	±0.4	R120	WR75	FBP/FBM/FBE	Al/Cu
SH–140WMT...	11.9–18.0	10–15	1.20	1.30	35	±0.4	R140	WR62	FBP/FBM/FBE	Al/Cu
SH–180WMT...	14.5–22.0	10–15	1.20	1.30	35	±0.4	R180	WR51	FBP/FBM/FBE	Al/Cu
SH–220WMT...	17.6–26.7	10–15	1.20	1.50	35	±0.4	R220	WR42	FBP/FBM/FBE	Al/Cu
SH–260WMT...	21.7–33.0	10–15	1.20	1.50	35	±0.4	R260	WR34	FBP/FBM/FBE	Al/Cu
SH–320WMT...	26.3–40.0	10–15	1.20	1.50	35	±0.4	R320	WR28	FBP/FBM/FBE	Al/Cu
SH–400WMT...	32.9–50.1	5–10	1.50	1.60	35	±0.5	R400	WR22	FUGP	Cu
SH–500WMT...	39.2–59.6	5–10	1.50	1.60	35	±0.5	R500	WR19	FUGP	Cu
SH–620WMT...	49.8–75.8	5–10	1.50	1.60	35	±0.5	R620	WR15	FUGP	Cu
SH–740WMT...	60.5–91.9	5–10	1.50	1.60	35	±0.5	R740	WR12	FUGP	Cu
SH–900WMT...	73.8–112	5–10	1.50	1.60	35	±0.5	R900	WR10	FUGP	Cu

*Indicates Model Number. See Ordering Information for complete part number.
**Typical operating bandwidth of the hybrid tee is up 20% of waveguide bandwidth. Performance degradation may occur while it covers wider waveguide bandwidth.



Ordering Information

Example Part No: SH – 100 WMT A

Shinhom Microwave

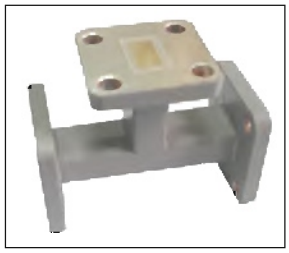
WG type:R100

Material : A=Aluminum C=Copper

Product Type: Magic Hybrid Tee

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

WAVEGUIDE TEE

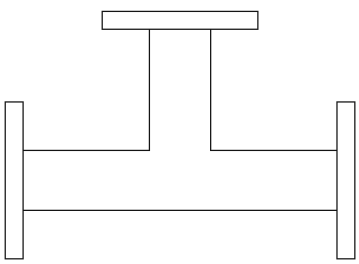


Shinhom Microwave's manufactures a wide variety of E–Plane Tees. The junction of the auxiliary arm is made on the broad wall of the main waveguide.

E–Plane Tee

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	WG Type		Flange	Material
		IEC	EIA		
SH–3WET	0.32–0.49	R3	WR2300	FDP/FDM	Al
SH–4WET	0.35–0.53	R4	WR2100	FDP/FDM	Al
SH–5WET	0.41–0.62	R5	WR1800	FDP/FDM	Al
SH–6WET	0.49–0.75	R6	WR1500	FDP/FDM	Al
SH–8WET	0.64–0.98	R8	WR1150	FDP/FDM	Al
SH–9WET	0.75–1.15	R9	WR975	FDP/FDM	Al
SH–12WET	0.96–1.46	R12	WR770	FDP/FDM	Al
SH–14WET	1.13–1.73	R14	WR650	FDP/FDM	Al
SH–18WET	1.45–220	R18	WR510	FDP/FDM	Al
SH–22WET	1.72–261	R22	WR430	FDP/FDM	Al/Cu
SH–26WET	2.17–330	R26	WR340	FDP/FDM	Al/Cu
SH–32WET	2.60–3.95	R32	WR284	FDP/FDM	Al/Cu
SH–40WET	3.22–4.90	R40	WR229	FDP/FDM	Al/Cu
SH–48WET	3.94–5.99	R48	WR187	FDP/FDM	Al/Cu
SH–58WET	4.64–7.05	R58	WR159	FDP/FDM	Al/Cu
SH–70WET	5.38–817	R70	WR137	FDP/FDM	Al/Cu
SH–84WET	6.57–9.99	R84	WR112	FBP/FBM/FBE	Al/Cu
SH–100WET	8.20–12.4	R100	WR90	FBP/FBM/FBE	Al/Cu
SH–120WET	9.84–15.0	R120	WR75	FBP/FBM/FBE	Al/Cu
SH–140WET	11.9–18.0	R140	WR62	FBP/FBM/FBE	Al/Cu
SH–180WET	14.5–22.0	R180	WR51	FBP/FBM/FBE	Al/Cu
SH–220WET	17.6–26.7	R220	WR42	FBP/FBM/FBE	Al/Cu
SH–260WET	21.7–33.0	R260	WR34	FBP/FBM/FBE	Al/Cu
SH–320WET	26.3–40.0	R320	WR28	FBP/FBM/FBE	Al/Cu
SH–400WET	32.9–60.1	R400	WR22	FUGP	Cu
SH–500WET	39.2–59.6	R500	WR19	FUGP	Cu
SH–620WET	49.8–75.8	R620	WR15	FUGP	Cu
SH–740WET	60.5–91.9	R740	WR12	FUGP	Cu
SH–900WET	73.8–112	R900	WR10	FUGP	Cu



Ordering Information

Example Part No: SH – 100 WET A

- SH: Shinhom Microwave
- 100: WG type:R100
- WET: Product Type:E–Plane Tee
- A: Material : A=Aluminum C=Copper

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

WAVEGUIDE COMPONENTS

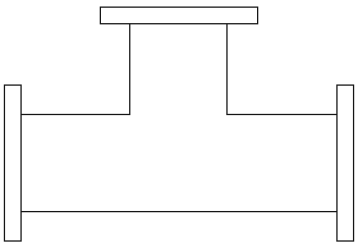
WAVEGUIDE TEE

Shinhom Microwave's manufactures a wide variety of H-Plane Tees.
The junction of the auxiliary arm is made on the narrow wall of the main waveguide.

H-Plane Tee

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	WG Type		Flange	Material
		IEC	EIA		
SH-3WHT	0.32-0.49	R3	WR2300	FDP/FDM	Al
SH-4WHT	0.35-0.53	R4	WR2100	FDP/FDM	Al
SH-5WHT	0.41-0.62	R5	WR1800	FDP/FDM	Al
SH-6WHT	0.49-0.75	R6	WR1500	FDP/FDM	Al
SH-8WHT	0.64-0.98	R8	WR1150	FDP/FDM	Al
SH-9WHT	0.75-1.15	R9	WR975	FDP/FDM	Al
SH-12WHT	0.96-1.46	R12	WR770	FDP/FDM	Al
SH-14WHT	1.13-1.73	R14	WR650	FDP/FDM	Al
SH-18WHT	1.45-220	R18	WR510	FDP/FDM	Al
SH-22WHT	1.72-261	R22	WR430	FDP/FDM	Al/Cu
SH-26WHT	2.17-330	R26	WR340	FDP/FDM	Al/Cu
SH-32WHT	2.60-3.95	R32	WR284	FDP/FDM	Al/Cu
SH-40WHT	3.22-4.90	R40	WR229	FDP/FDM	Al/Cu
SH-48WHT	3.94-5.99	R48	WR187	FDP/FDM	Al/Cu
SH-56WHT	4.64-7.05	R56	WR159	FDP/FDM	Al/Cu
SH-70WHT	5.38-817	R70	WR137	FDP/FDM	Al/Cu
SH-84WHT	6.57-9.99	R84	WR112	FBP/FBM/FBE	Al/Cu
SH-100WHT	8.20-12.4	R100	WR90	FBP/FBM/FBE	Al/Cu
SH-120WHT	9.84-15.0	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-140WHT	11.9-18.0	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-180WHT	14.5-22.0	R180	WR51	FBP/FBM/FBE	Al/Cu
SH-220WHT	17.6-26.7	R220	WR42	FBP/FBM/FBE	Al/Cu
SH-260WHT	21.7-33.0	R260	WR34	FBP/FBM/FBE	Al/Cu
SH-320WHT	26.3-40.0	R320	WR28	FBP/FBM/FBE	Al/Cu
SH-400WHT	32.9-50.1	R400	WR22	FUGP	Cu
SH-500WHT	39.2-59.6	R500	WR19	FUGP	Cu
SH-620WHT	49.8-75.8	R620	WR15	FUGP	Cu
SH-740WHT	60.5-91.9	R740	WR12	FUGP	Cu
SH-900WHT	73.8-112	R900	WR10	FUGP	Cu



Ordering Information

Example Part No: SH - 100 WET A

- SH: Shinhom Microwave
- 100: WG type:R100
- WET: Product Type: H-Plane Tee
- A: Material : A=Aluminum C=Copper

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

WAVEGUIDE TERMINATION (DUMMY LOAD)

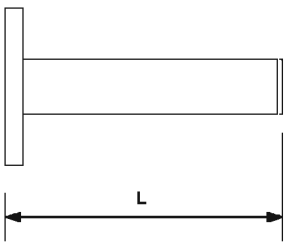
Waveguide Low Power Termination

Shinhom Microwave's standard product line of low power terminations utilizes precision conical load elements for optimum electrical performance. This series of terminations is designed for low power input. VSWR is less than 1.05 over the full waveguide bandwidth.

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR (Max)	Avg Power (W)	Length (L)(mm)	WG Type		Flange	Material
					IEC	EIA		
SH-3WL1.05...	0.32-0.49	1.05	2	2005	R3	WR2300	FDP/FDM	Al
SH-4WL1.05...	0.35-0.53	1.05	2	1900	R4	WR2100	FDP/FDM	Al
SH-5WL1.05...	0.41-0.62	1.05	2	1600	R5	WR1800	FDP/FDM	Al
SH-6WL1.05...	0.49-0.75	1.05	2	1300	R6	WR1500	FDP/FDM	Al
SH-8WL1.05...	0.64-0.98	1.05	2	1100	R8	WR1150	FDP/FDM	Al
SH-9WL1.05...	0.75-1.15	1.03	2	660	R9	WR975	FDP/FDM	Al
SH-12WL1.05...	0.96-1.46	1.05	2	680	R12	WR770	FDP/FDM	Al
SH-14WL1.05...	1.13-1.73	1.03	2	570	R14	WR650	FDP/FDM	Al
SH-18WL1.05...	1.45-2.20	1.05	2	550	R18	WR510	FDP/FDM	Al/Cu
SH-22WL1.05...	1.72-2.61	1.03	2	470	R22	WR430	FDP/FDM	Al/Cu
SH-26WL1.05...	2.17-3.30	1.03	2	350	R26	WR340	FDP/FDM	Al/Cu
SH-32WL1.05...	2.60-3.95	1.03	2	275	R32	WR284	FDP/FDM	Al/Cu
SH-40WL1.05...	3.22-4.90	1.03	2	275	R40	WR229	FDP/FDM	Al/Cu
SH-48WL1.05...	3.94 5.99	1.03	2	170	R48	WR187	FDP/FDM	Al/Cu
SH-58WL1.05...	4.64-7.05	1.03	2	135	R58	WR159	FDP/FDM	Al/Cu
SH-70WL1.05...	5.38-8.17	1.03	2	180	R70	WR137	FDP/FDM	Al/Cu
SH-84WL1.05...	6.57-9.99	1.03	2	150	R84	WR112	FBP/FBM/FBE	Al/Cu
SH-100WL1.05...	8.20-12.40	1.03	2	130	R100	WR90	FBP/FBM/FBE	Al/Cu
SH-120WL1.05...	9.84-15.0	1.03	2	110	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-140WL1.05...	11.8-18.0	1.03	2	90	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-180WL1.05...	14.5-22.0	1.03	2	75	R180	WR51	FBP/FBM/FBE	Al/Cu
SH-220WL1.05...	17.6-26.7	1.03	2	65	R220	WR42	FBP/FBM/FBE	Al/Cu
SH-260WL1.05...	21.7-33.0	1.03	2	55	R260	WR34	FBP/FBM/FBE	Al/Cu
SH-320WL1.05...	26.3-40.0	1.03	2	40	R320	WR28	FBP/FBM/FBE	Al/Cu

*Indicates Model Number. See Ordering Information for complete part number.



Ordering Information

Example Part No: SH – 100 WL 1.05 M A

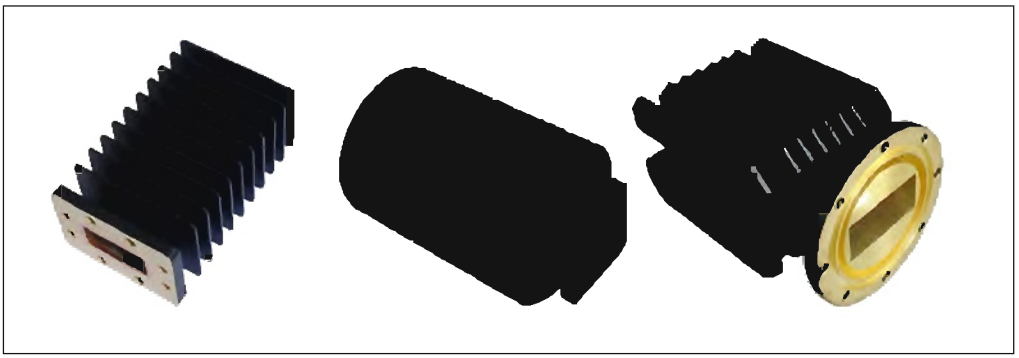
- SH: Shinhom Microwave
- 100: WG type:R100
- WL: Product Type:WG Low Power Termination
- 1.05: Max VSWR:1.05
- M: Flange Type: M=FBM100
- A: Material : A=Aluminum C=Copper

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

WAVEGUIDE TERMINATION (DUMMY LOAD)

Waveguide High Power Termination

Shinhom Microwave manufactures a wide selection of high power terminations. Please call us and discuss your special needs with one of our sales engineers.



ELECTRICAL CHARACTERISTICS:

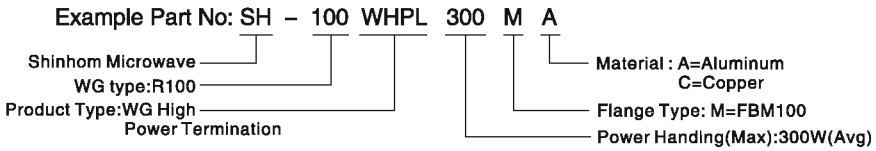
Part No.	Freq Range (GHz)	VSWR (Max)	Avg Power (W)	WG Type		Flange	Material
				IEC	EIA		
SH-14WHPL100...	1.13-1.73	1.20	100	R14	Wr650	FDP/FDM	Al
SH-14WHPL350...	1.13-1.73	1.20	350	R14	Wr650	FDP/FDM	Al
SH-14WHPL500...	1.13-1.73	1.20	500	R14	Wr650	FDP/FDM	Al
SH-14WHPL1000...	1.13-1.73	1.20	1000	R14	Wr650	FDP/FDM	Al
SH-18WHPL100...	1.45-2.20	1.20	100	R18	Wr510	FDP/FDM	Al/Cu
SH-18WHPL300...	1.45-2.20	1.20	300	R18	Wr510	FDP/FDM	Al/Cu
SH-18WHPL500...	1.45-2.20	1.20	500	R18	Wr510	FDP/FDM	Al/Cu
SH-18WHPL1000...	1.45-2.20	1.20	1000	R18	Wr510	FDP/FDM	Al/Cu
SH-22WHPL100...	1.72-2.61	1.15	100	R22	Wr430	FDP/FDM	Al/Cu
SH-22WHPL250...	1.72-2.61	1.15	250	R22	Wr430	FDP/FDM	Al/Cu
SH-26WHPL300...	2.17-3.30	1.15	300	R26	Wr340	FDP/FDM	Al/Cu
SH-26WHPL800...	2.17-3.30	1.15	800	R26	Wr340	FDP/FDM	Al/Cu
SH-32WHPL250...	2.60-3.95	1.10	250	R32	Wr284	FDP/FDM	Al/Cu
SH-32WHPL500...	2.60-3.95	1.10	500	R32	Wr284	FDP/FDM	Al/Cu
SH-40WHPL300...	3.22-4.90	1.10	500	R40	Wr229	FDP/FDM	Al/Cu
SH-48WHPL70...	3.94-5.99	1.10	70	R48	Wr187	FDP/FDM	Al/Cu
SH-48WHPL100...	3.94-5.99	1.10	100	R48	Wr187	FDP/FDM	Al/Cu
SH-48WHPL400...	3.94-5.99	1.10	400	R48	Wr187	FDP/FDM	Al/Cu
SH-48WHPL500...	3.94-5.99	1.10	500	R48	Wr187	FDP/FDM	Al/Cu
SH-48WHPL1000...	3.94-5.99	1.10	1000	R48	Wr187	FDP/FDM	Al/Cu
SH-58WHPL50...	4.64-7.05	1.10	50	R58	Wr159	FDP/FDM	Al/Cu
SH-58WHPL800...	4.64-7.05	1.10	800	R58	Wr159	FDP/FDM	Al/Cu
SH-70WHPL70...	5.38-8.17	1.10	76	R70	Wr137	FDP/FDM	Al/Cu
SH-70WHPL150...	5.38-8.17	1.10	150	R70	Wr137	FDP/FDM	Al/Cu
SH-70WHPL200...	5.38-8.17	1.10	200	R70	Wr137	FDP/FDM	Al/Cu
SH-70WHPL250...	5.38-8.17	1.10	250	R70	Wr137	FDP/FDM	Al/Cu

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR (Max)	Avg Power (W)	WG Type		Flange	Material
				IEC	EIA		
SH-70WHPL300...	5.38-8.17	1.10	300	R70	WR137	FDP/FDM	Al/Cu
SH-70WHPL500...	5.38-8.17	1.10	500	R70	WR137	FDP/FDM	Al/Cu
SH-70WHPL550...	5.38-8.17	1.10	550	R70	WR137	FDP/FDM	Al/Cu
SH-84WHPL300...	6.57-9.99	1.10	300	R84	WR112	FBP/FBM/FBE	Al/Cu
SH-84WHPL500...	6.57-9.99	1.10	500	R84	WR112	FBP/FBM/FBE	Al/Cu
SH-100WHPL100...	8.20-12.40	1.10	100	R100	WR90	FBP/FBM/FBE	Al/Cu
SH-100WHPL200...	8.20-12.40	1.10	200	R100	WR90	FBP/FBM/FBE	Al/Cu
SH-100WHPL300...	8.20-12.40	1.10	300	R100	WR90	FBP/FBM/FBE	Al/Cu
SH-120WHPL50...	9.84-15.0	1.10	50	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-120WHPL75...	9.84-15.0	1.10	75	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-120WHPL150...	9.84-15.0	1.10	150	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-120WHPL200...	9.84-15.0	1.10	200	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-120WHPL400...	9.84-15.0	1.10	400	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-140WHPL50...	11.9-18.0	1.10	50	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-140WHPL100...	11.9-18.0	1.10	100	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-140WHPL200...	11.9-18.0	1.10	200	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-140WHPL300...	11.9-18.0	1.10	300	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-140WHPL400...	11.9-18.0	1.10	400	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-140WHPL500...	11.9-18.0	1.10	500	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-180WHPL50...	14.5-22.0	1.15	50	R180	WR51	FBP/FBM/FBE	Al/Cu
SH-180WHPL500...	14.5-22.0	1.15	500	R180	WR51	FBP/FBM/FBE	Al/Cu
SH-220WHPL100...	17.6-26.7	1.15	100	R220	WR42	FBP/FBM/FBE	Al/Cu
SH-220WHPL200...	17.6-26.7	1.15	200	R220	WR42	FBP/FBM/FBE	Al/Cu
SH-260WHPL100...	21.7-33.0	1.15	100	R260	WR34	FBP/FBM/FBE	Al/Cu
SH-320WHPL30...	26.3-40.0	1.15	30	R320	WR28	FBP/FBM/FBE	Al/Cu
SH-400WHPL10...	32.9-50.1	1.15	10	R400	WR22	FBP/FBM/FBE	Cu
SH-400WHPL20...	32.9-50.1	1.15	20	R400	WR22	FBP/FBM/FBE	Cu

***Indicates Model Number. See Ordering Information for complete part number.**
****VSWR refers to 30% of waveguide bandwidth.**

Ordering Information



- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat

WAVEGUIDE TERMINATION

Waveguide Termination

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	VSWR	Length L(mm)	Avg Power(W)	Flange	Material
SH-3WL1.05	WR2300	0.32-0.49	≤1.05	2200	20	FDP	Al
SH-4WL1.05	WR2100	0.35-0.53	≤1.05	1900	20	FDP	Al
SH-5WL1.05	WR1800	0.41-0.62	≤1.05	1300	15	FDP	Al
SH-6WL1.05	WR1500	.49-0.75	≤1.05	1300	15	FDP	Al
SH-8WL1.05	WR1150	0.64-0.98	≤1.05	1100	15	FDP	Al
SH-9WL1.05	WR975	0.75-1.15	≤1.05	900	15	FDP	Al
SH-12WL1.03	WR770	0.96-1.46	≤1.03	880	10	FDP	Al
SH-14WL1.03	WR650	1.13-1.73	≤1.03	570	10	FDP	Al
SH-18WL1.03	WR510	1.45-2.20	≤1.03	540	10	FDP	Al
SH-22WL1.03	WR430	1.72-2.61	≤1.03	450	10	FDP	Al
SH-26WL1.03	WR340	2.17-3.30	≤1.03	350	5	FDP	Al
SH-32WL1.03	WR284	2.60-3.95	≤1.03	300	5	FDP	Al
SH-40WL1.03	WR229	3.22-4.90	≤1.03	250	5	FDP	Al
SH-48WL1.03	WR187	3.94-5.99	≤1.03	220	5	FDP	Al
SH-58WL1.03	WR159	4.64-7.05	≤1.03	200	5	FDP	Al
SH-70WL1.03	WR137	5.38-8.17	≤1.03	180	5	FDP	Cu
SH-84WL1.03	WR112	6.57-9.99	≤1.03	150	5	FBP	Cu
SH-100WL1.03	WR90	8.20-12.40	≤1.03	130	2	FBP	Cu
SH-120WL1.03	WR75	9.84-15.0	≤1.03	110	2	FBP	Cu
SH-140WL1.03	WR62	11.9-18.0	≤1.03	90	2	FBP	Cu
SH-180WL1.03	WR51	14.5-22.0	≤1.03	75	2	FBP	Cu
SH-220WL1.03	WR42	17.6-26.72	≤1.03	65	1	FBP	Cu
SH-260WL1.03	WR34	1.7-33.0	≤1.03	55	1	FBP	Cu
SH-320WL.03	WR28	26.5-40.0	≤1.03	50	1	FBP	Cu
SH-400WL1.15	WR22	32.9-50.1	≤1.15	40	0.5	FUGP	Cu
SH-500WL1.15	WR19	39.2-59.6	≤1.15	40	0.5	FUGP	Cu
SH-620WL1.15	WR15	49.8-75.8	≤1.15	38	0.5	FUGP	Cu
SH-740WL1.15	WR12	60.5-91.9	≤1.15	30	0.5	FUGP	Cu
SH-900WL1.15	WR10	73.8-112	≤1.15	30	0.5	FUGP	Cu
SH-1200WL120	WR8	92.2-140	≤1.20	25	0.3	FUGP	Cu
SH-1400WL1.20	WR7	113-173	≤1.20	22	0.3	FUGP	Cu
SH-1800WL1.25	WR5	145-220	≤1.25	20	0.3	FUGP	Cu
SH-2200WL1_25	WR4	172-261	≤1.25	20	0.3	FUGP	Cu
SH-2600WL1-25	WR3	217-330	≤1.25	20	0.3	FUGP	Cu

WAVEGUIDE TERMINATION

Small Size Waveguide Termination

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR	Length L(mm)	Flange	Material
SH-3WLS1.07	WR2300	0.32-0.49	10%	≤1.07	300-600	FDP	Al
SH-4WLS1.07	WR2100	0.35-0.53	10%	≤1.07	250-550	FDP	Al
SH-5WLS1.07	WR1800	0,41-0.62	10%	≤1.07	250-500	FDP	Al
SH-6WL51.07	WR1500	0.49-0.75	10%	≤1.07	200-400	FDP	Al
SH-8WLS1.07	WR1150	0.64-0.98	10%	≤1.07	170-350	FDP	Al
SH-9WL51.07	WR975	0.75-1.15	10%	≤1.07	150-300	FDP	Al
SH-12WLS1.05	WR770	0.96-1.46	10%	≤1.05	120-250	FDP	Al
SH-14WLS1.05	WR650	1.13-1.73	10%	≤1.05	100-200	FDP	Al
SH-18WLS1.05	WR510	1.45-2.20	10%	≤1.05	70-150	FDP	Al
SH-22WL51.05	WR430	1.72-2.61	10%	≤1.05	60-130	FDP	Al
SH-26WLS1.05	WR340	2.17-3.30	10%	≤1.05	50-100	FDP	Al
SH-32WLS1.05	WR284	2.60-3.95	10%	≤1.05	40-80	FDP	Al
SH-40WLS1.05	WR229	3.22-4.90	10%	≤1.05	40-80	FDP	Al
SH-48WLS1.05	WR187	3.94-5.99	10%	≤1.05	40-70	FDP	Al
SH-58WLS1.05	WR159	4.64-7.05	10%	≤1.05	30-60	FDP	Al
SH-70WLS1.05	WR137	5.38-8.17	10%	≤1.05	25-50	FDP	Cu
SH-84WLS1.05	WR112	6.57-9.99	10%	≤1.05	20-40	FBP	Cu
SH-100WLS1.05	WR90	8.20-12.40	10%	≤1.05	15-30	FBP	Cu
SH-120WLS1.05	WR75	9.84-15.0	10%	≤1.05	15-30	FBP	Cu
SH-140WLS1.05	WR62	11.9-18.0	10%	≤1.05	10-20	FBP	Cu
SH-180WLS1.05	WR51	14.5-22.0	10%	≤1.05	10-20	FBP	Cu
SH-220WLS1.05	WR42	17.6-26.7	10%	≤1.05	10-16	FBP	Cu
SH-260WLS1.07	WR34	21.7-33.0	10%	≤1.07	10-16	FBP	Cu
SH-320WLS1.07	WR28	26.5-40.0	10%	≤1.07	8-15	FBP	Cu
SH-400WLS1.10	WR22	32.9-50.1	10%	≤1.10	7-15	FUGP	Cu
SH-500WLS1.10	WR19	39.2-59.6	10%	≤1.10	6-12	FUGP	Cu
SH-620WLS1.10	WR15	49.8-75.8	10%	≤1.10	6-12	FUGP	Cu
SH-740WLS1.15	WR12	60.5-91.9	10%	≤1.15	5-10	FUGP	Cu
SH-900WLS1.15	WR10	73.8-112	10%	≤1.15	5-10	FUGP	Cu

WAVEGUIDE TERMINATION

Waveguide Sliding Termination

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	VSWR	Sliding Distance(mm)	Flange	Material
SH-14WSL1.05	WR650	1.13-1.73	≤1.05	≥70	FDP	Cu
SH-18WSL1.05	WR510	1.45-2.20	≤1.05	≥55	FDP	Cu
SH-22WSL1.05	WR430	1.72-2.61	≤1.05	≥45	FDP	Cu
SH-26WSL1.05	WR340	2.17-3.30	≤1.05	≥36	FDP	Cu
SH-32WSL1.05	WR284	2.60-3.95	≤1.05	≥30	FDP	Cu
SH-40WSL1.05	WR229	3.22-4.90	≤1.05	≥25	FDP	Cu
SH-48WSL1.05	WR187	3.94-5.99	≤1.05	≥20	FDP	Cu
SH-58WSL1.05	WR159	4.64-7.05	≤1.05	≥17	FDP	Cu
SH-70WSL1.05	WR137	5.38-8.17	≤1.05	≥15	FDP	Cu
SH-84WSL1.05	WR112	6.57-9.99	≤1.05	≥24	FBP	Cu
SH-100WSL1.05	WR90	8.20-12.40	≤1.05	≥20	FBP	Cu
SH-120WSL1.05	WR75	9.84-15.0	≤1.05	≥16	FBP	Cu
SH-140WSL1.05	WR62	11.9-18.0	≤1.05	≥13	FBP	Cu
SH-180WSL1.05	WR51	14.5-22.0	≤1.05	≥11	FBP	Cu
SH-220WSL1.05	WR42	17.6-26.7	≤1.05	≥9	FBP	Cu
SH-260WSL1.05	WR34	21.7-33.0	≤1.05	≥7.2	FBP	Cu
SH-320WSL1.05	WR28	26.5-40.0	≤1.05	≥9	FBP	Cu
SH-400WSL1.15	WR22	32.9-50.1	≤1.15	≥2	FUGP	Cu
SH-500WSL1.15	WR19	39.2-59.6	≤1.15	≥4	FUGP	Cu
SH-620WSL1.15	WR15	49.8-75.8	≤1.15	≥3.3	FUGP	Cu
SH-740WSL1.15	WR12	60.5-91.9	≤1.15	≥2.6	FUGP	Cu
SH-900WSL1.15	WR10	73.8-112	≤1.15	≥2.1	FUGP	Cu

WAVEGUIDE TERMINATION

Waveguide Unmatched Termination

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	VSWR	Length (mm)	Flange	Material
SH-5WUL...	WR1800	0.41-0.62	1.2/1.5/2.0	1600	FDP	Al
SH-6WUL...	WR1500	0.49-0.75	1.2/1.5/2.0	1300	FDP	Al
SH-8WUL...	WR1150	0.64-0.98	1.2/1.5/2.0	1100	FDP	Al
SH-9WUL...	WR975	0.75-1.15	1.2/1.5/2.0	660	FDP	Al
SH-12WUL...	WR770	0.96-1.46	1.2/1.5/2.0	680	FDP	Al
SH-14WUL...	WR650	1.13-1.73	1.2/1.5/2.0	570	FDP	Al
SH-18WUL...	WR510	1.45-2.20	1.2/1.5/2.0	550	FDP	Al
SH-22WUL...	WR430	1.72-2.61	1.2/1.5/2.0	470	FDP	Al
SH-26WUL...	WR340	2.17-3.30	1.2/1.5/2.0	350	FDP	Al
SH-32WUL...	WR284	2.60-3.95	1.2/1.5/2.0	278	FDP	Al
SH-40WUL...	WR229	3.22-4.90	1.2/1.5/2.0	275	FDP	Al
SH-48WUL...	WR187	3.94-5.99	1.2/1.5/2.0	170	FDP	Al
SH-58WUL...	WR159	4.64-7.05	1.2/1.5/2.0	135	FDP	Al
SH-70WUL...	WR137	5.38-8.17	1.2/1.5/2.0	180	FDP	Cu
SH-84WUL...	WR112	6.57-9.99	1.2/1.5/2.0	100	FBP	Cu
SH-100WUL...	WR90	8.20-12.40	1.2/1.5/2.0	100	FBP	Cu
SH-120WUL...	WR75	9.84-15.0	1.2/1.5/2.0	90	FBP	Cu
SH-140WUL...	WR62	11.9-18.0	1.2/1.5/2.0	90	FBP	Cu
SH-180WUL...	WR51	14.5-22.0	1.2/1.5/2.0	75	FBP	Cu
SH-220WuL...	WR42	17.6-26.7	1.2/1.5/2.0	60	FBP	Cu
SH-260WUL...	WR34	21.7-33.0	1.2/1.5/2.0	55	FBP	Cu
SH-320WUL...	WR28	26.5-40.0	1.2/1.5/2.0	40	FBP	Cu
SH-400WUL...	WR22	32.9-50.1	1.2/1.5/2.0	40	FUGP	Cu
SH-500WUL..	WR19	39.2-59.6	1.2/1.5/2.0	40	FUGP	Cu
SH-620WUL...	WR15	49.8-75.8	1.2/1.5/2.0	40	FUGP	Cu
SH-740WUL...	WR12	60.5-91.9	1.2/1.5/2.0	38	FUGP	Cu
SH-900WUL...	WRI0	73.8-112	1.2/1.5/2.0	35	FUGP	Cu

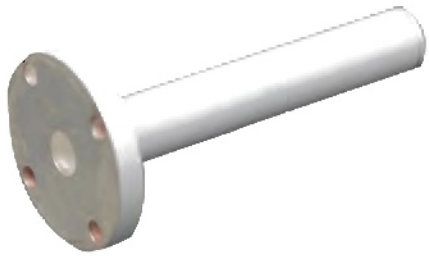
WAVEGUIDE TERMINATION

Double-Ridged Waveguide Termination

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	VSWR	Length (mm)	Avg Power(W)	Flange	Material
SH-84DRWL1.15	WRD84	0.84-2	≤1.15	720	5	FP	Al
SH-150DRWL1.15	WRD150	1.5-3.6	≤1.15	650	5	FP	Al
SH-200DRWL1.15	WRD200	2-4.8	≤1.15	340	5	FP	Al
SH-250DRWL1.15	WRD250	2.6-7.8	≤1.15	300	5	FP	Al
SH-350DRWL1.15	WRD350	3.5-8.2	≤1.15	260	5	FP	Al
SH-475DRWL1.15	WRD475	4.75-11	≤1.15	200	2	FP	Al
SH-500DRWL1.15	WRD500	5-18	≤1.15	210	2	FP	Al
SH-580DRWL1.15	WRD580	5.8-18	≤1.15	210	2	FP	Al
SH-650DRWL1.15	WRD650	6.5-18	≤1.15	102	1	FP	Cu
SH-750DRWL1.15	WRD750	7.5-18	≤1.15	140	1	FP	Cu
SH-700DRWL1.15	WRD700	7-18.5	≤1.15	200	1	FP	Cu
SH-1100DRWL1.15	WRD110	11-26.5	≤1.15	150	0.5	FP	Cu
SH-1800DRWL1.15	WRD180	18-40	≤1.15	109	0.5	FP	Cu

WAVEGUIDE TERMINATION

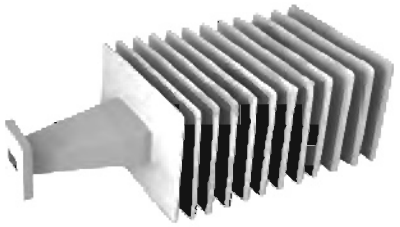


Circular Waveguide Termination

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Inner DiameterΦ (mm)	Length (mm)	VSWR
SH-114.58CWL1.07	1.76-2.42	114.58	580	≤1.15
SH-97.87CWL1.07	2.1-2.8	97.87	470	≤1.15
SH-83.62CWL1.07	2.45-3.3	83.62	400	≤1.15
SH-71.42CWL1.07	2.83-3.88	71.42	360	≤1.15
SH-51.99CWL1.07	3.9-5.34.5	51.99	300	≤1.15
SH-44.45CWL1.05	5-6.23	44.45	250	≤1.15
SH-38.1CWL1.05	5.3-7.3	38.1	190	≤1.15
SH-32.537CWL1.05	6.3-8.5	32.537	170	≤1.15
SH-27.788CWL1.05	7.3-9.5	27.788	160	≤1.15
SH-23.825CWL1.05	8.5-11.5	23.825	150	≤1.15
SH-17.415CWL1.05	11.6-15.9	17.415	140	≤1.15
SH-15.088CWL1.05	13.4-18.4	15.088	130	≤1.15
SH-12.7CWL1.05	15.9-21.8	12.7	120	≤1.15
SH-9.525CWL1.05	21.2-29.1	9.525	100	≤1.15
SH-8.331CWL1.05	24.3-33.2	8.331	80	≤1.15
SH-7.137CWL1.05	28.3-38.8	7.137	70	≤1.15
SH-5.563CWL1.07	36.4-49.8	5.563	65	≤1.15
SH-4.369CWL1.07	46.3-63.5	4.369	50	≤1.15
SH-3.581CWL1.10	56.6-77.5	3.581	45	≤1.15
SH-3.175CWL1.12	63.5-87.2	3.175	45	≤1.15
SH-2.388CWL115	84.8-116.0	2.388	45	≤1.15

WAVEGUIDE TERMINATION



Circular Waveguide Termination

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	VSWR	Avg Power(W)	Flange	Material
SH-3WHPL...	WR2300	0.32-0.49	≤1.25	10-4000	FDP	10-4000
SH-4WHPL...	WR2100	0.35-0.53	≤1.25	10-4000	FDP	10-4000
SH-5WHPL...	WR1800	0.41-0.62	≤1.25	10-4000	FDP	10-4000
SH-6WHPL...	WR1500	0.49-0.75	≤1.25	10-4000	FDP	10-4000
SH-8WHPL...	WR1150	0.64-0.98	≤1.25	10-4000	FDP	10-4000
SH-9WHPL...	WR975	0.75-1.15	≤1.25	10-4000	FDP	10-4000
SH-12WHPL...	WR770	0.96-1.46	≤1.25	10-4000	FDP	10-4000
SH-14WHPL...	WR650	1.13-1.73	≤1.25	10-4000	FDP	10-4000
SH-18WHPL...	WR510	1.45-2.20	≤1.25	10-4000	FDP	10-4000
SH-22WHPL...	WR430	1.72-2.61	≤1.25	10-4000	FDP	10-4000
SH-26WHPL...	WR340	2.17-3.30	≤1.25	10-4000	FDP	10-4000
SH-32WHPL...	WR284	2.60-3.95	≤1.25	10-4000	FDP	10-4000
SH-40WHPL...	WR229	3.22-4.90	≤1.25	10-4000	FDP	10-4000
SH-48WHPL...	WR187	3.94-5.99	≤1.25	10-4000	FDP	10-4000
SH-58WHPL...	WR159	4.64-7.05	≤1.25	10-4000	FDP	10-4000
SH-70WHPL...	WR137	5.38-8.17	≤1.25	10-3000	FDP	10-3000
SH-84WHPL...	WR112	6.57-9.99	≤1.25	10-3000	FBP	10-3000
SH-100WHP...	WR90	8.20-12.40	≤1.25	10-3000	FBP	10-3000
SH-120WHPL...	WR75	9.84-15.0	≤1.25	10-3000	FBP	10-3000
SH-140WHPL...	WR62	11.9-18.0	≤1.25	10-1000	FBP	10-1000
SH-180WHPL...	WR51	14.5-22.0	≤1.25	10-1000	FBP	10-1000
SH-220WHPL...	WR42	17.6-26.7	≤1.25	10-600	FBP	10-600
SH-260WHPL...	WR34	21.7-33.0	≤1.25	10-600	FBP	10-600
SH-320WHPL...	WR28	26.5-40.0	≤1.25	10-600	FBP	10-600
SH-400WHPL...	WR22	32.9-50.1	≤1.25	10-600	FUGP	10-600
SH-500WHPL...	WR19	39.2-59.6	≤1.25	10-300	FUGP	10-300
SH-620WHPL...	WR15	49.8-75.8	≤1.25	10-300	FUGP	10-300
SH-740WHPL...	WR12	60.5-91.9	≤1.25	10-200	FUGP	10-200
SH-900WHPL...	WR10	73.8-112	≤1.25	10-200	FUGP	10-200

WAVEGUIDE TERMINATION

Double-Ridged High Power Waveguide Termination

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	VSWR	Avg Power(W)	Flange	Material
SH-84DRWHPL...	WRD84	0.84-2	≤1.25	10-2000	FP	Al
SH-150DRWHPL...	WRD150	1.5-3.6	≤1.25	10-2000	FP	Al
SH-200DRWHPL...	WRD200	2-4.8	≤1.25	10-2000	FP	Al
SH-250DRWHPL...	WRD250	2.6-7.8	≤1.25	10-2000	FP	Al
SH-350DRWHPL...	WRD350	3.5-8.2	≤1.25	10-2000	FP	Al
SH-475DRWHPL...	WRD475	4.75-11	≤1.25	10-1000	FP	Al
SH-500DRWHPL...	WRD500	5-18	≤1.25	10-1000	FP	Al
SH-580DRWHPL...	WRD580	5.8-16	≤1.25	10-1000	FP	Al
SH-650DRWHPL...	WRD650	6.5-18	≤1.25	10-1000	FP	Cu
SH-750DRWHPL...	WRD750	7.5-18	≤1.25	10-1000	FP	Cu
SH-700DRWHPL...	WRD700	7-18.5	≤1.25	10-1000	FP	Cu
SH-1100DRWHPL...	WRD110	11-26.5	≤1.25	10-600	FP	Cu
SH-1800DRWHPL...	WRD180	18-40	≤1.25	10-600	FP	Cu

WAVEGUDIE TO COAXIAL ADAPTER

Wavegudie to Coaxial Adapter (Right Angle)

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	VSWR	IL(dB)	Connector	Avg Power(W)	Length L(mm)	Flange	Material
SH-3WCAN	WR2300	0.32-0.49	≤1.25	≤0.2	N Female	100	500	FDP	Al
SH-4WCAN	WR2100	0.35-0.53	≤1.25	≤0.2	N Female	100	450	FDP	Al
SH-5WCAN	WR1800	0.41-0.62	≤1.25	≤0.2	N Female	100	400	FDP	Al
SH-6WCAN	WR1500	0.49-0.75	≤1.25	≤0.2	N Female	100	350	FDP	Al
SH-8WCAN	WR1150	0.64-0.98	≤1.25	≤0.2	N Female	100	240	FDP	Al
SH-9WCAN	WR975	0.75-1.15	≤1.25	≤0.2	N Female	100	209	FDP	Al
SH-12WCAN	WR770	0.96-1.46	≤1.25	≤0.2	N Female	100	188	FDP	Al
SH-14WCAN	WR650	1.13-1.73	≤1.25	≤0.2	N Female	100	150	FDP	Al
SH-18WCAN	WR510	1.45-2.20	≤1.25	≤0.2	N Female	100	120	FDP	Al
SH-22WCAN	WR430	1.72-2.61	≤1.25	≤0.2	N Female	100	100	FDP	Al
SH-26WCAN	WR340	2.17-3.30	≤1.25	≤0.2	N Female	100	85	FDP	Al
SH-32WCAN	WR284	2.60-3.95	≤1.25	≤0.2	N Female	100	72	FDP	Al
SH-40WCAN	WR229	3.22-4.90	≤1.25	≤0.2	N Female	100	65	FDP	Al
SH-48WCAN	WR187	3.94-5.99	≤1.25	≤0.2	N Female	100	54	FDP	Al
SH-48WCAS	WR187	3.94-5.99	≤1.25	≤0.2	SMA Female	50	67	FDP	Al
SH-58WCAN	WR159	4.64-7.05	≤1.25	≤0.2	N Female	100	50	FDP	Al
SH-58WCAS	WR159	4.64-7.05	≤1.25	≤0.2	SMA Female	50	52	FDP	Al
SH-70WCAN	WR137	5.38-8.17	≤1.25	≤0.2	N Female	100	46	FDP	Cu
SH-70WCAS	WR137	5.38-8.17	≤1.25	≤0.2	SMA Female	50	45	FDP	Cu
SH-84WCAN	WR112	6.57-9.99	≤1.25	≤0.3	N Female	100	40	FBP	Cu
SH-84WCAS	WR112	6.57-9.99	≤1.25	≤0.3	SMA Female	50	35	FBP	Cu
SH-100WCAN	WR90	8.20-12.4	≤1.25	≤0.3	N Female	100	35	FBP	Cu
SH-100WCAS	WR90	8.20-12.4	≤1.25	≤0.3	SMA Female	50	33	FBP	Cu
SH-120WCAN	WR75	9.84-15.0	≤1.25	≤0.3	N Female	100	33	FBP	Cu
SH-120WCAS	WR75	9.84-15.0	≤1.25	≤0.3	SMA Female	50	30	FBP	Cu
SH-140WCAN	WR62	11.9-18.0	≤1.25	≤0.3	N Female	100	32	FBP	Cu
SH-140WCAS	WR62	11.9-18.0	≤1.25	≤0.3	SMA Female	50	27	FBP	Cu
SH-180WCAS	WR51	14.5-22.0	≤1.25	≤0.3	SMA Female	30	27	FBP	Cu
SH-220WCAS	WR42	17.6-26.7	≤1.25	≤0.3	SMA Female	30	25	FBP	Cu
SH-220WCAK	WR42	17.6-26.7	≤1.25	≤0.3	2.92 Female	50	30	FBP	Cu
SH-220WCAV	WR42	17.6-26.7	≤1.25	≤0.3	2.4 Female	30	30	FBP	Cu
SH-260WCAK	WR34	21.7-33.0	≤1.25	≤0.3	2.92 Female	50	30	FBP	Cu
SH-260WCAV	WR34	21.7-33.0	≤1.25	≤0.3	2.4 Female	30	30	FBP	Cu
SH-320WCAK	WR28	26.5-40.0	≤1.25	≤0.3	2.92 Female	50	26	FBP	Cu
SH-320WCAV	WR28	26.5-40.0	≤1.25	≤0.3	2.4 Female	30	26	FBP	Cu
SH-400WCAV	WR22	33.0-50.0	≤1.80	≤0.5	2.4 Female	30	25	FUGP	Cu
SH-500WCA185	WR19	40.0-60.0	≤1.80	≤0.8	1.85 Female	10	23	FUGP	Cu
SH-620WCA185	WR15	50.0-65.0	≤2.0	≤0.8	1.85 Female	10	18	FUGP	Cu
SH-740WCA1.0	WR12	60.0-90.0	≤2.0	≤0.8	1.0 Female	10	23	FUGP	Cu
SH-900WCA1.0	WR10	90.0-100.0	≤2.0	≤0.8	1.0 Female	10	25	FUGP	Cu

WAVEGUDIE TO COAXIAL ADAPTER

Wavegudie to Coaxial Adapter (Right Angle)

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	VSWR	IL(dB)	Connector	Avg Power(W)	Length L(mm)	Flange	Material
SH-3WECAN	WR2300	0.32-0.49	≤1.25	≤0.2	N Female	100	700	FDP	Al
SH-4WECAN	WR2100	0.35-0.53	≤1.25	≤0.2	N Female	100	600	FDP	Al
SH-5WECAN	WR1800	0.41-0.62	≤1.25	≤0.2	N Female	100	550	FDP	Al
SH-6WECAN	WR1500	0.49-0.75	≤1.25	≤0.2	N Female	100	450	FDP	Al
SH-8WECAN	WR1150	0.64-0.98	≤1.25	≤0.2	N Female	100	360	FDP	Al
SH-9WECAN	WR975	0.75-1.15	≤1.25	≤0.2	N Female	100	300	FDP	Al
SH-12WECAN	WR770	0.96-146	≤1.25	≤0.2	N Female	100	260	FDP	Al
SH-14WECAN	WR650	1.13-173	≤1.25	≤0.2	N Female	100	200	FDP	Al
SH-18WECAN	WR510	1.45-2.20	≤1.25	≤0.2	N Female	100	150	FDP	Al
SH-22WECAN	WR430	1.72-2.61	≤1.25	≤0.2	N Female	100	110	FDP	Al
SH-26WECAN	WR340	2.17-3.30	≤1.25	≤0.2	N Female	100	100	FDP	Al
SH-32WECAN	WR284	2.60-3.95	≤1.25	≤0.2	N Female	100	82	FDP	Al
SH-40WECAN	WR229	3.22-4.90	≤1.25	≤0.2	N Female	100	68	FDP	Al
SH-48WECAN	WR187	3.94-5.99	≤1.25	≤0.2	N Female	100	58	FDP	Al
SH-48WECAS	WR187	3.94-5.99	≤1.25	≤0.2	SMA Female	50	59	FDP	Al
SH-58WECAN	WR159	4.64-7.05	≤1.25	≤0.2	N Female	100	56	FDP	Al
SH-58WECAS	WR159	4.64-7.05	≤1.25	≤0.2	SMA Female	50	54	FDP	Al
SH-70WECAN	WR137	5.38-8.17	≤1.25	≤0.3	N Female	100	50	FDP	Cu
SH-70WECAS	WR137	5.38-8.17	≤1.25	≤0.3	SMA Female	50	50	FDP	Cu
SH-84WECAN	WR112	6.57-9.99	≤1.25	≤0.3	N Female	100	40	FBP	Cu
SH-84WECAS	WR112	6.57-9.99	≤1.25	≤0.3	SMA Female	50	40	FBP	Cu
SH-100WECAN	WR90	8.20-12.4	≤1.25	≤0.3	N Female	100	30.5	FBP	Cu
SH-100WECAS	WR90	8.20-12.4	≤1.25	≤0.3	SMA Female	50	30.5	FBP	Cu
SH-120WECAN	WR75	9.84-15.0	≤1.25	≤0.3	N Female	100	21	FBP	Cu
SH-120WECAS	WR75	9.84-15.0	≤1.25	≤0.3	SMA Female	50	21	FBP	Cu
SH-140WECAN	WR62	11.9-18.0	≤1.25	≤0.3	N Female	100	24	FBP	Cu
SH-140WECAS	WR62	11.9-18.0	≤1.25	≤0.3	SMA Female	50	24	FBP	Cu
SH-180WECAS	WR51	14.5-22.0	≤1.25	≤0.3	SMA Female	50	25	FBP	Cu
SH-220WECAS	WR42	17.6-26	≤1.25	≤0.3	SMA Female	50	17.5	FBP	Cu
SH-220WECAK	WR42	17.6-26.7	≤1.25	≤0.3	2.92 Female	50	18	FBP	Cu
SH-220WECAV	WR42	17.6-26.7	≤1.25	≤0.3	2.4 Female	30	18	FBP	Cu
SH-260WECAK	WR34	21.7-33.0	≤1.25	≤0.3	2.92 Female	50	21	FBP	Cu
SH-260WECAV	WR34	21.7-33.0	≤1.25	≤0.3	2.4 Female	30	21	FBP	Cu
SH-320WECAK	WR28	26.5-40.0	≤1.25	≤0.3	2.92 Female	50	16	FBP	Cu
SH-320WECAV	WR28	26.5-40.0	≤1.50	≤0.3	2.4 Female	30	16.5	FBP	Cu
SH-400WECAV	WR22	33.0-50.0	≤1.80	≤0.3	2.4 Female	30	8.8	FUGP	Cu
SH-500WECAV	WR19	40.0-50.0	≤2.0	≤0.4	2.4 Female	30	7	FUGP	Cu
SH-500WECA1.85	WR19	40.0-60.0	≤1.80	≤0.6	1.85 Female	10	7	FUGP	Cu
SH-620WECA1.85	WR15	50.0-65.0	≤1.80	≤0.8	1.85 Female	10	7	FUGP	Cu
SH-740WECA1.0	WR12	60.0-90.0	≤1.80	≤0.8	1.0 Female	10	6	FUGP	Cu
SH-900WECA1.0	WR10	90.0-100.0	≤2.0	≤0.8	1.0 Female	10	6	FUGP	Cu

WAVEGUDIE TO COAXIAL ADAPTER

High Power Wavegudie to Coaxial Adapter

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR	IL(dB)	Connector	Avg Power(W)	Flange	Material
SH-14WHPCA15/8	WR650	1.13-1.73	≤15%	≤1.15	≤0.2	1'5/8 Female	≤5000	FDP	Al
SH-14WHPCA5339	WR650	1.13-1.73	≤15%	≤1.15	≤0.2	5339 Female	≤5000	FDP	Al
SH-14WHPCAL29	WR650	1.13-1.73	≤15%	≤1.15	≤0.2	L29 Female	≤2000	FDP	Al
SH-14WHPCAL27	WR650	1.13-1.73	≤15%	≤1.15	≤0.2	L27 Female	≤2000	FDP	Al
SH-18WHPCA15/8	WR510	1.45-2.20	≤15%	≤1.15	≤0.2	1'5/8 Female	≤4000	FDP	Al
SH-18WHPCA5339	WR510	1.45-2.20	≤15%	≤1.15	≤0.2	5339 Female	≤4000	FDP	Al
SH-18WHPCAL29	WR510	1.45-2.20	≤15%	≤1.15	≤0.2	L29 Female	≤2000	FDP	Al
SH-18WHPCAL27	WR510	1.45-2.20	≤15%	≤1.15	≤0.2	L27 Female	≤2000	FDP	Al
SH-22WHPCA1 5/8	WR430	1.72-2.61	≤15%	≤1.15	≤0.2	1'5/8 Female	≤3000	FDP	Al
SH-22WHPCA5339	WR430	1.76-2.61	≤15%	≤1.15	≤0.2	5339 Female	≤3000	FDP	Al
SH-22WHPCAL29	WR430	1.72-2.61	≤15%	≤1.15	≤0.2	L29 Female	≤2000	FDP	Al
SH-22WHPCAL27	WR430	1.72-2.61	≤15%	≤1.15	≤0.2	L27 Female	≤2000	FDP	Al
SH-26WHPCAL29	WR340	2.17-3.30	≤15%	≤1.15	≤0.2	L29 Female	≤2000	FDP	Al
SH-26WHPCAL27	WR340	2.17-3.30	≤15%	≤1.15	≤0.2	L27 Female	≤2000	FDP	Al
SH-32WHPCAL29	WR284	2.60-3.95	≤15%	≤1.15	≤0.2	L29 Female	≤1000	FDP	Al
SH-32WHPCAL27	WR284	2.60-3.95	≤15%	≤1.15	≤0.2	L27 Female	≤1000	FDP	Al
SH-40WHPCAL29	WR229	3.22-4.90	≤15%	≤1.15	≤0.2	L29 Female	≤1000	FDP	Al
SH-40WHPCAL27	WR229	3.22-4.90	≤15%	≤1.15	≤0.2	L27 Female	≤1000	FDP	Al
SH-40WHPCAN	WR229	3.22-4.90	≤15%	≤1.25	≤0.2	N Female	≤200	FDP	Al
SH-48WHPCAL29	WR187	3.94-5.99	≤15%	≤1.15	≤0.2	L29 Female	≤1000	FDP	Al
SH-48WHPCAL27	WR187	3.94-5.99	≤15%	≤1.15	≤0.2	L27 Female	≤1000	FDP	Al
SH-48WHPCAN	WR187	3.94-5.99	≤15%	≤1.25	≤0.2	N Female	≤200	FDP	Al
SH-58WHPCAN	WR159	4.64-7.05	≤15%	≤1.25	≤0.2	N Female	≤200	FDP	Al
SH-70WHPCAN	WR137	5.38-8.17	≤15%	≤1.25	≤0.3	N Female	≤200	FDP	Cu
SH-84WHPCAN	WR112	6.57-9.99	≤15%	≤1.25	≤0.3	N Female	≤200	FBP	Cu
SH-100WHPCAN	WR90	8.20-12.4	≤15%	≤1.25	≤0.3	N Female	≤200	FBP	Cu
SH-120WHPCAN	WR75	9.84-15.0	≤15%	≤1.25	≤0.3	N Female	≤200	FBP	Cu
SH-140WHPCAN	WR62	11.9-18.0	≤15%	≤1.15	≤0.3	N Female	≤200	FBP	Cu

WAVEGUDIE TO COAXIAL ADAPTER

Double–Ridged Wavegudie to Coaxial Adapter (Right Angle)

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	VSWR	IL(dB)	Connector	Avg Power(W)	Length L(mm)	Flange	Material
SH–84DRWCAN	WRD84	0.84–2	≤1.50	≤0.50	N Female	800	175	FP	Al
SH–150DRWCAN	WRD150	1.5–3.6	≤1.50	≤0.50	N Female	800	150	FP	Al
SH–200DRWCAN	WRD200	2–4.6	≤1.50	≤0.50	N Female	500	101	FP	Al
SH–250DRWCAN	WRD250	2.6–7.6	≤1.50	≤0.50	N Female	500	70	FP	Al
SH–350DRWCAN	WRD350	3.5–8.2	≤1.50	≤0.50	N Female	500	60	FP	Al
SH–475DRWCAN	WRD475	4.75–11	≤1.50	≤0.50	N Female	300	50	FP	Al
SH–500DRWCAS	WRD500	5–18	≤1.50	≤0.50	SMA Female	300	45	FP	Al
SH–580DRWCAS	WRD580	5.8–16	≤1.50	≤0.50	SMA Female	300	45	FP	Al
SH–650DRWCAS	WRD650	6.5–18	≤1.50	≤0.50	SMA Female	100	45	FP	Cu
SH–750DRWCAS	WRD750	7.5–18	≤1.50	≤0.50	SMA Female	100	40	FP	Cu
SH–700DRWCAS	WRD700	7–18.5	≤1.50	≤0.50	SMA Female	100	40	FP	Cu
SH–1100DRWCAK	WRD110	11–26.5	≤1.50	≤0.50	2.92 Female	50	35	FP	Cu
SH–1800DRWCAK	WRD180	18–40	≤2.00	≤0.50	2.92 Female	50	27	FP	Cu

Double–Ridged Wavegudie to Coaxial Adapter (End Launch)

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	VSWR	IL(dB)	Connector	Avg Power(W)	Length L(mm)	Flange	Material
SH–84DRWECAN	WRD84	0.84–2	≤1.50	≤0.50	N Female	800	300	FP	Al
SH–150DRWECAN	WRD150	1.5–3.6	≤1.50	≤0.50	N Female	800	160	FP	Al
SH–200DRWECAN	WRD200	2–4.6	≤1.50	≤0.50	N Female	500	120	FP	Al
SH–250DRWECAN	WRD250	2.6–7.6	≤1.50	≤0.50	N Female	500	85	FP	Al
SH–350DRWECAN	WRD350	3.5–8.2	≤1.50	≤0.50	N Female	500	80	FP	Al
SH–475DRWECAN	WRD475	4.75–11	≤1.50	≤0.50	N Female	300	50	FP	Al
SH–500DRWECAS	WRD500	5–18	≤1.50	≤0.50	SMA Female	300	45	FP	Al
SH–580DRWECAS	WRD580	5.8–16	≤1.50	≤0.50	SMA Female	300	40	FP	Al
SH–650DRWECAS	WRD650	6.5–18	≤1.50	≤0.50	SMA Female	100	33.7	FP	Cu
SH–750DRWECAS	WRD750	7.5–18	≤1.50	≤0.50	SMA Female	100	33.7	FP	Cu
SH–700DRWECAS	WRD700	7–18.5	≤1.50	≤0.50	SMA Female	50	33	FP	Cu
SH–1100DRWECAK	WRD110	11–26.5	≤1.50	≤0.50	2.92 Female	30	30	FP	Cu
SH–1800DRWECAK	WRD180	18–40	≤2.00	≤0.80	2.92 Female	30	36.8	FP	Cu

WAVEGUDIE TO COAXIAL ADAPTER

High Power Double-Ridged Wavegudie to Coaxial Adapter

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	VSWR	IL(dB)	Connector	Avg Power(W)	Flange	Material
SH-84DRWHPCA5339	WRD84	0.84-2	≤1.50	≤0.50	5339 Female	1000	FP	Al
SH-84DRWHPCAL29	WRD84	0.84-2	≤1.50	≤0.50	L29 Female	500	FP	Al
SH-84DRWHPCAL27	WRD84	0.84-2	≤1.50	≤0.50	L27 Female	500	FP	Al
SH-84DRWHPCAN	WRD84	0.84-2	≤1.50	≤0.50	N Female	300	FP	Al
SH-150DRWHPCAN	WRD150	1.5-3.6	≤1.50	≤0.50	N Female	300	FP	Al
SH-200DRWHPCAN	WRD200	2-4.8	≤1.50	≤0.50	N Female	300	FP	Al
SH-250DRWHPCAN	WRD250	2.6-7.8	≤1.50	≤0.50	N Female	300	FP	Al
SH-350DRWHPCAN	WRD350	3.5-8.2	≤1.50	≤0.50	N Female	200	FP	Al
SH-475DRWHPCAN	WRD475	4.75-11	≤1.50	≤0.50	N Female	200	FP	Al
SH-500DRWHPCAN	WRD500	5-18	≤1.50	≤0.50	N Female	200	FP	Al
SH-580DRWHPCAN	WRD580	5.8-16	≤1.50	≤0.50	N Female	200	FP	Al
SH-650DRWHPCAN	WRD650	6.5-18	≤1.50	≤0.50	N Female	200	FP	Cu
SH-750DRWHPCAN	WRD750	7.5-18	≤2.00	≤0.50	N Female	200	FP	Cu

Circular Waveguide to Coaxial Adapter

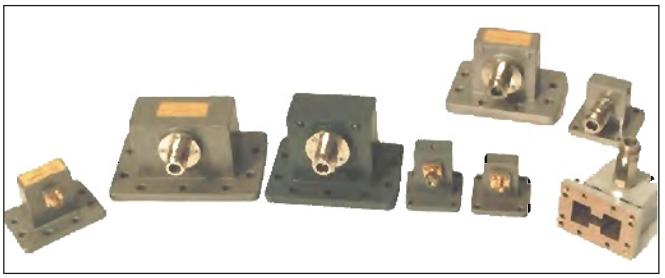
ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Working Bandwidth	Inner DiameterΦ(mm)	VSWR	Connector
SH-114.56CWCAN	1.76-2.42	≤20%	114.56	≤1.25	N Female
SH-97.87CWCAN	2.1-2.8	≤20%	97.87	≤1.25	N Female
SH-83.82CWCAN	2.45-3.3	≤20%	83.82	≤1.25	N Female
SH-71.42CWCAN	2.83-3.88	≤20%	71.42	≤1.25	N Female
SH-51.99CWCAN	3.9-5.34.5	≤20%	51.99	≤1.25	N Female
SH-44.45CWCAN	5-6.23	≤20%	44.45	≤1.25	N Female
SH-38.1CWCAN	5.3-7.3	≤20%	38.1	≤1.25	N Female
SH-32.537CWCAN	6.3-8.5	≤20%	32.537	≤1.25	N Female
SH-27.788CWCAN	7.3-9.5	≤20%	27.788	≤1.25	N Female
SH-23.825CWCAN	8.5-11.5	≤20%	23.825	≤1.25	N Female
SH-17.415CWCAS	11.6-15.9	≤20%	17.415	≤1.25	SMA Female
SH-15.088CWCAS	13.4-18.4	≤20%	15.088	≤1.25	SMA Female
SH-12.7CWCAS	15.9-21.8	≤20%	12.7	≤1.25	SMA Female
SH-9.525CWCAK	21.2-29.1	≤20%	9.525	≤1.25	2.92 Female
SH-8.331CWCAK	24.3-33.2	≤15%	8.33	≤1.30	2.92 Female
SH-7.137CWCAK	28.3-38.8	≤15%	17.137	≤1.30	2.92 Female

WAVEGUIDE TO COAXIAL ADAPTER

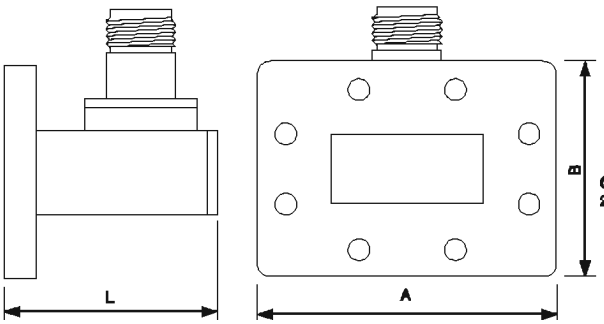
Waveguide to Coaxial Adapter (Right Angle)

Shinhom Microwave manufactures Waveguide to Coaxial Adapters covering a full frequency range for Rectangular Waveguides, with multiple flange and coaxial connector types and configurations available. For more information feel free to call us and discuss your needs with one of our sales engineers.



ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR (Max)	Dimensions L*B*A(mm)	WG Type		Flange	Material
				IEC	EIA		
SH-3WCAN...	0.32-0.49	1.25	400*384*676	R3	WR2300	FDP/FDM	Al
SH-4WCAN...	0.35-0.53	1.25	360*359*626	R4	WR2100	FDP/FDM	Al
SH-5WCAN...	0.41-0.62	1.25	350*318*546	R5	WR1800	FDP/FDM	Al
SH-6WCAN...	0.49-0.75	1.25	300*280*470	R6	WR1500	FDP/FDM	Al
SH-8WCAN...	0.64-0.98	1.25	260*235*381	R8	WR1150	FDP/FDM	Al
SH-9WCAN...	0.75-1.15	1.25	231*212*336	R9	WR975	FDP/FDM	Al
SH-12WCAN...	0.96-1.46	1.25	166*187*285	R12	WR770	FDP/FDM	Al
SH-14WCAN...	1.13-1.73	1.25	150*138*220	R14	WR650	FDP/FDM	Al
SH-18WCAN...	1.45-2.20	1.25	120*120*185	R18	WR510	FDP/FDM	Al/Cu
SH-22WCAN...	1.72-2.61	1.25	100*106*161	R22	WR430	FDP/FDM	Al/Cu
SH-28WCAN...	2.17-3.30	1.25	90*95*138	R28	WR340	FDP/FDM	Al/Cu
SH-32WCAN...	2.60-3.95	1.25	72*76*114	R32	WR284	FDP/FDM	Al/Cu
SH-40WCAN...	3.22-4.90	1.25	65*70*98	R40	WR229	FDP/FDM	Al/Cu
SH-48WCAN...	3.94-5.99	1.25	54*63*89	R48	WR187	FDP/FDM	Al/Cu
SH-58WCAN...	4.64-7.05	1.25	50*82*81	R58	WR159	FDP/FDM	Al/Cu
SH-70WCAN...	5.38-8.17	1.25	48*49*66	R70	WR137	FDP/FDM	Al/Cu
SH-84WCAN...	6.57-9.99	1.25	40*48*48	R84	WR112	FBP/FBM/FBE	Al/Cu
SH-100WCAN...	8.20-12.4	1.25	38*41*41	R100	WR90	FBP/FBM/FBE	Al/Cu
SH-120WCAN...	9.84-15.0	1.25	30*38*38	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-140WCAN...	11.9-18.0	1.25	27*33*33	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-180WCAN...	14.5-22.0	1.25	27*30*30	R180	WR51	FBP/FBM/FBE	Al/Cu



Type N Waveguide to Coaxial Adapters

Ordering Information

Example Part No: SH - 70 WCA N K M A

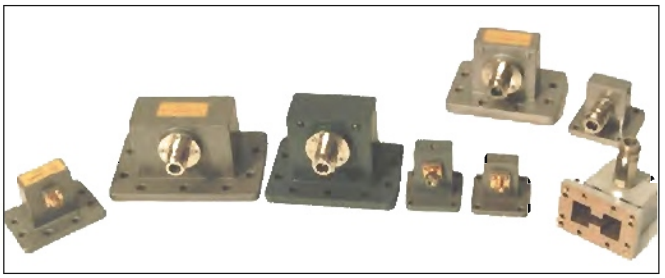
- SH: Shinhom Microwave
- 70: WG type: R70
- WCA: Product Type: WG To Coaxial Adapter
- N: Coax Connector Type: N=Type N, S=SMA, 2.92=K2.92mm, 2.4=2.4mm, TNC=TNC
- K: J=Male, K=Female
- M: Flange Type: M=FDM70
- A: Material : A=Aluminum C=Copper

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black/grey top coat
- Standard unit provided not sealed pressure tight unless otherwise specified

WAVEGUIDE TO COAXIAL ADAPTER

Waveguide to Coaxial Adapter (Right Angle)

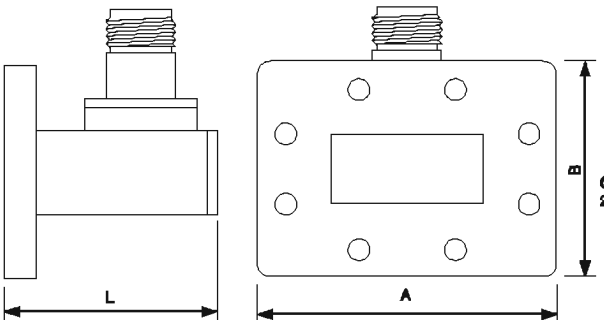
Shinhom Microwave manufactures Waveguide to Coaxial Adapters covering a full frequency range for Rectangular Waveguides, with multiple flange and coaxial connector types and configurations available. For more information feel free to call us and discuss your needs with one of our sales engineers.



SMA Waveguide to Coaxial Adapters

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR (Max)	Dimensions L*B*A(mm)	WG Type		Flange	Material
				IEC	EIA		
SH-100WCAS...	8.20-12.4	1.25	38*41*41	R100	WR90	FBP/FBM/FBE	Al/Cu
SH-100WCAS...	9.84-15.0	1.25	30*38*38	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-100WCAS...	11.9-18.0	1.25	27*33*33	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-100WCAS...	14.5-22.0	1.25	27*30*30	R180	WR51	FBP/FBM/FBE	Al/Cu
SH-100WCAS...	17.6-26.7	1.40	25*22*22	R220	WR42	FBP/FBM/FBE	Al/Cu
SH-100WCAS...	26.3-40.0	1.50	25*19*19	R320	WR28	FBP/FBM/FBE	Al/Cu



Type N Waveguide to Coaxial Adapters

Ordering Information

Example Part No: SH - 100 WCA S K P C

- SH: Shinhom Microwave
- 100: WG type: R100
- WCA: Product Type: WG To Coaxial Adapter
- S: Coax Connector Type: N=Type N, S=SMA, 2.92=K2.92mm, 2.4=2.4mm, TNC=TNC
- K: J=Male, K=Female
- P: Flange Type: P=FBP100
- C: Material : A=Aluminum, C=Copper

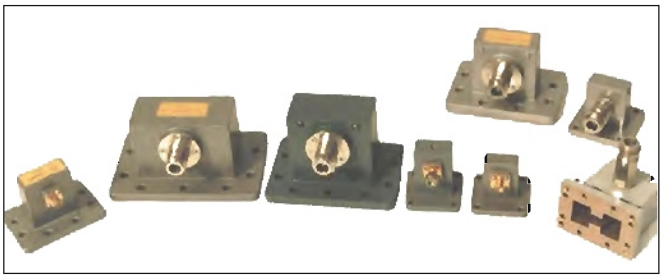
- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat
- Standard unit provided not sealed pressure tight unless otherwise specified

WAVEGUIDE COMPONENTS

WAVEGUIDE TO COAXIAL ADAPTER

Waveguide to Coaxial Adapter (Right Angle)

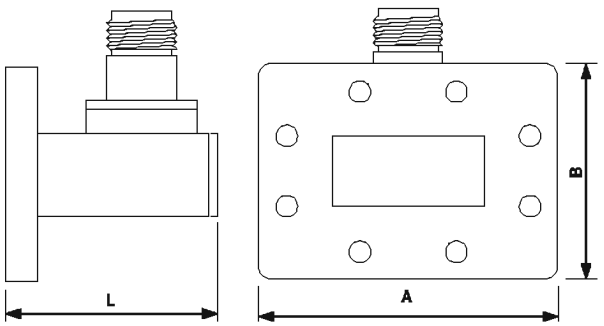
Shinhom Microwave manufactures Waveguide to Coaxial Adapters covering a full frequency range for Rectangular Waveguides, with multiple flange and coaxial connector types and configurations available. For more information feel free to call us and discuss your needs with one of our sales engineers.



K2.92mm Waveguide to Coaxial Adapters

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR (Max)	Dimensions L*B*A(mm)	WG Type		Flange	Material
				IEC	EIA		
SH-220WCA2.92...	17.6-26.7	1.35	33*22*22	R220	WR42	FBP/FBM/FBE	Al/Cu
SH-260WCA2.92...	21.7-33.0	1.35	27*21*21	R260	WR34	FBP/FBM/FBE	Al/Cu
SH-320WCA2.92...	26.3-40.0	1.25	25*19*19	R320	WR28	FBP/FBM/FBE	Al/Cu
SH-400WCA2.92...	33.0-50.0	1.80	31*28.6*28.6	R400	WR22	FUGP	Cu



Type N Waveguide to Coaxial Adapters

Ordering Information

Example Part No: SH – 220 WCA 2.92 K P C

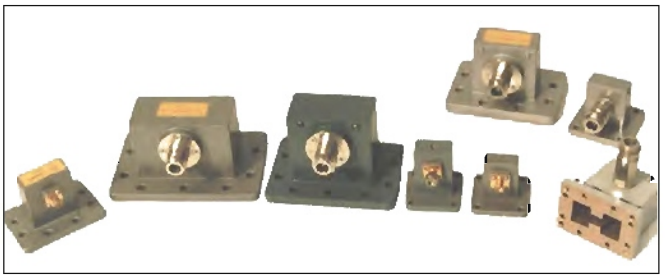
- Shinhom Microwave
- WG type: R220
- Product Type: WG To Coaxial Adapter
- Coax Connector Type: N=Type N, S=SMA, 2.92=K2.92mm, 2.4=2.4mm, TNC=TNC
- Material : A=Aluminum C=Copper
- Flange Type: P=FBP220
- J=Male, K=Female

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat
- Standard unit provided not sealed pressure tight unless otherwise specified

WAVEGUIDE TO COAXIAL ADAPTER

Waveguide to Coaxial Adapter (Right Angle)

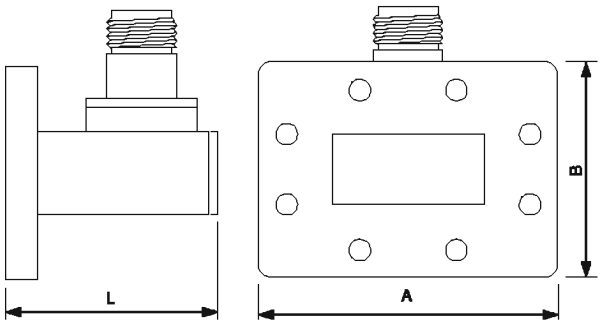
Shinhom Microwave manufactures Waveguide to Coaxial Adapters covering a full frequency range for Rectangular Waveguides, with multiple flange and coaxial connector types and configurations available. For more information feel free to call us and discuss your needs with one of our sales engineers.



2.4mm Waveguide to Coaxial Adapters

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR (Max)	Dimensions L*B*A(mm)	WG Type		Flange	Material
				IEC	EIA		
SH-220WCA2.4...	17.6-26.7	1.35	36*22*22	R220	WR42	FBP/FBM/FBE	Al/Cu
SH-260WCA2.4...	21.7-33.0	1.35	27*21*21	R260	WR34	FBP/FBM/FBE	Al/Cu
SH-320WCA2.4...	26.3-40.0	1.35	25*19*19	R320	WR28	FBP/FBM/FBE	Al/Cu
SH-400WCA2.4...	33.0-50.0	1.50	25*28.6*28.6	R400	WR22	FUGP	Cu



Type N Waveguide to Coaxial Adapters

Ordering Information

Example Part No: SH – 320 WCA 2.4 K P C

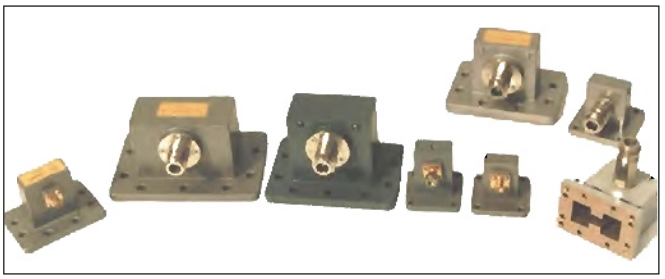
- Shinhom Microwave
- WG type: R320
- Product Type: WG To Coaxial Adapter
- Coax Connector Type: N=Type N, S=SMA, 2.92=K2.92mm, 2.4=2.4mm, TNC=TNC
- Material : A=Aluminum C=Copper
- Flange Type: P=FBP320
- J=Male, K=Female

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat
- Standard unit provided not sealed pressure tight unless otherwise specified

WAVEGUIDE TO COAXIAL ADAPTER

Waveguide to Coaxial Adapter Right Angle)

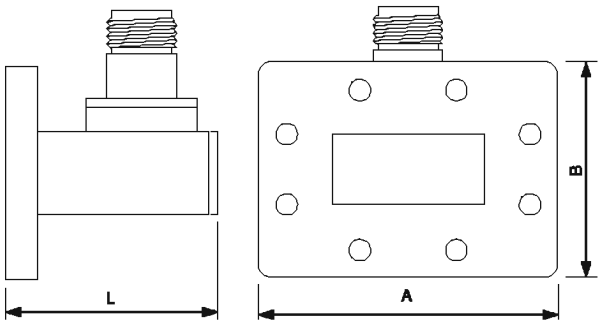
Shinhom Microwave manufactures Waveguide to Coaxial Adapters covering a full frequency range for Rectangular Waveguides, with multiple flange and coaxial connector types and configurations available. For more information feel free to call us and discuss your needs with one of our sales engineers.



1.85mm Waveguide to Coaxial Adapters

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR (Max)	Dimensions L*B*A(mm)	WG Type		Flange	Material
				IEC	EIA		
SH-400WCA1.85...	33-55	1.50	27*28.6*28.6	R400	WR22	FUGP	Cu
SH-500WCA1.85...	40-60	1.50	27*28.6*28.6	R500	WR19	FUGP	Cu
SH-620WCA1.85...	55-65	1.80	30*19.1*19.1	R620	WR15	FUGP	Cu
SH-740WCA1.85...	55-65	1.80	28*28.6*28.6	R740	WR12	FUGP	Cu



Type N Waveguide to Coaxial Adapters

Ordering Information

Example Part No: SH – 320 WCA 1.85 K P C

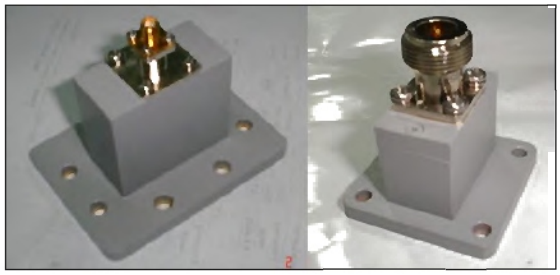
- Shinhom Microwave
- WG type: R320
- Product Type: WG To Coaxial Adapter
- Coax Connector Type: N=Type N, S=SMA, 2.92=K2.92mm, 2.4=2.4mm, TNC=TNC 1.85=1.85mm
- Material : A=Aluminum C=Copper
- Flange Type: P=FBP320
- J=Male, K=Female

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat
- Standard unit provided not sealed pressure tight unless otherwise specified

WAVEGUIDE TO COAXIAL ADAPTER

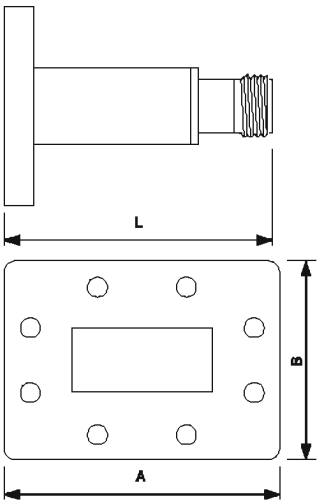
Waveguide to Coaxial Adapter (End–launch)

Shinhom Microwave manufactures End–launch Waveguide to Coaxial Adapters covering a full frequency range for Rectangular Waveguides, with multiple flange and coaxial connector types and configurations available. For more information feel free to call us and discuss your needs with one of our sales engineers.



ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR (Max)	Connector Type	Dimensions L*B*A(mm)	WG Type		Flange	Material
					IEC	EIA		
SH–22WECAN...	1.72–2.61	1.25	N	128.7*106161	R22	WR430	FDP/FDM	Al/Cu
SH–22WECAS...	1.72–2.61	1.25	SMA	113.4*106*161	R22	WR430	FDP/FDM	Al/Cu
SH–26WECAN...	2.17–3.30	1.25	N	116.7*95*138	R26	WR340	FDP/FDM	Al/Cu
SH–32WECAN...	2.60–3.95	1.25	N	108.7*76*114	R32	WR284	FDP/FDM	Al/Cu
SH–40WECAN...	3.22–4.90	1.25	N	94.7*70*98	R40	WR229	FDP/FDM	Al/Cu
SH–48WECAN...	3.94–5.99	1.25	N	74.7*63*89	R48	WR187	FDP/FDM	Al/Cu
SH–48WECAS...	3.94–5.99	1.25	SMA	78.4*63*89	R48	WR187	FDP/FDM	Al/Cu
SH–58WECAN...	4.64–7.05	1.25	N	72.4*62*81	R58	WR159	FDP/FDM	Al/Cu
SH–70WECAN...	5.38–8.17	1.25	N	68.6*49*68	R70	WR137	FDP/FDM	Al/Cu
SH–84WECAN...	6.57–9.99	1.25	N	58.6*48*48	R84	WR112	FBP/FBM/FBE	Al/Cu
SH–84WECAS...	6.57–9.99	1.25	SMA	48.5*48*48	R84	WR112	FBP/FBM/FBE	Al/Cu
SH–100WECAN...	8.20–12.40	1.25	N	48.3*41*41	R100	WR90	FBP/FBM/FBE	Al/Cu
SH–100WECAS...	8.20–12.40	1.25	SMA	40*41*41	R100	WR90	FBP/FBM/FBE	Al/Cu
SH–120WECAN...	9.84–15.0	1.25	N	46.3*38*38	R120	WR75	FBP/FBM/FBE	Al/Cu
SH–120WECAS...	9.84–15.0	1.25	SMA	37*38*38	R120	WR75	FBP/FBM/FBE	Al/Cu
SH–140WECAN...	11.9–18.0	1.25	N	43.3*33*33	R140	WR62	FBP/FBM/FBE	Al/Cu
SH–140WECAS...	11.9–18.0	1.25	SMA	34*33*33	R140	WR62	FBP/FBM/FBE	Al/Cu
SH–220WECAS...	17.6–26.7	1.50	SMA	26.5*22*22	R220	WR42	FBP/FBM/FBE	Al/Cu
SH–220WECAK...	17.6–26.7	1.50	K2.92mm	27.6*22*22	R220	WR42	FBP/FBM/FBE	Al/Cu
SH–260WECAS...	21.7–33.0	1.50	SMA	26.121*21	R260	WR34	FBP/FBM/FBE	Al/Cu
SH–260WECAK...	21.7–33.0	1.50	K2.92mm	29*21*21	R260	WR34	FBP/FBM/FBE	Al/Cu
SH–320WECAS...	26.3–40.0	1.50	SMA	25.9*19*19	R320	WR28	FBP/FBM/FBE	Al/Cu
SH–320WECAK...	26.3–40.0	1.50	K2.92mm	28.9*19*19	R320	WR28	FBP/FBM/FBE	Al/Cu
SH–400WECAV...	33.0–50.0	1.50	V2.4mm	19*28.6*28.6	R400	WR22	FUGP	Cu
SH–620WECA1.85	50.0–67.0	1.80	1.85mm	17.65*19.1*19.1	R620	WR19	FUGP	Cu



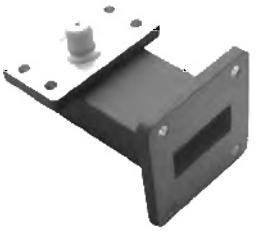
Ordering Information

Example Part No: SH – 70 WECA N K M A

- SH: Shinhom Microwave
- 70: WG type: R70
- WECA: Product Type: WG To Coaxial Adapter(End–launch)
- N: Coax Connector Type: N=Type N, S=SMA, 2.92=K2.92mm, 2.4=2.4mm, TNC=TNC
- K: J=Male, K=Female
- M: Flange Type: M=FDM70
- A: Material : A=Aluminum, C=Copper

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black top coat
- Standard unit provided not sealed pressure tight unless otherwise specified

WAVEGUIDE TO MICROSTRIP ADAPTER



Waveguide to Microstrip Adapter (Right Angle)

ELECTRICAL CHARACTERISTICS:

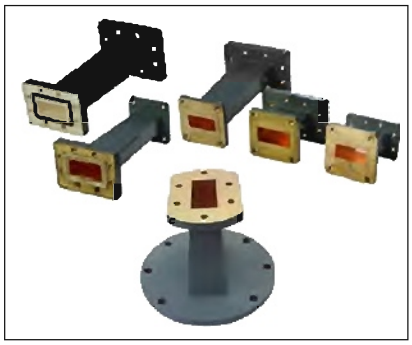
Part No.	WG Type EIA	Freq Range (GHz)	Working Bandwidth	VSWR	IL(dB)	Avg Power(W)	Length L(mm)	Flange	Material
SH-32WMI	WR284	2.60-3.95	≤15%	≤1.25	≤0.2	100	80	FDP	Al
SH-40WMI	WR229	3.22-4.90	≤15%	≤1.25	≤0.2	100	70	FDP	Al
SH-48WMI	WR187	3.94-5.99	≤15%	≤1.25	≤0.2	100	70	FDP	Al
SH-58WMI	WR159	4.64-7.05	≤15%	≤1.25	≤0.2	100	60	FDP	Al
SH-70WMI	WR137	5.38-8.17	≤15%	≤1.25	≤0.2	100	50	FDP	Cu
SH-84WMI	WR112	6.57-9.99	≤15%	≤1.25	≤0.2	50	45	FBP	Cu
SH-100WMI	WR90	8.20-12.40	≤15%	≤1.25	≤0.2	50	50	FBP	Cu
SH-120WMI	WR75	9.84-15.0	≤15%	≤1.25	≤0.2	50	40	FBP	Cu
SH-140WMI	WR62	11.9-18.0	≤15%	≤1.25	≤0.2	50	40	FBP	Cu
SH-180WMI	WR51	14.5-22.0	≤15%	≤1.25	≤0.2	50	35	FBP	Cu
SH-220WMI	WR42	17.6-26.7	≤15%	≤1.50	≤0.3	30	30	FBP	Cu
SH-260WMI	WR34	21.7-33.0	≤15%	≤1.50	≤0.5	30	26	FBP	Cu
SH-320WMI	WR28	26.5-40.0	≤15%	≤1.50	≤0.5	30	26	FBP	Cu

Waveguide to Microstrip Adapter (End Launch)

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type EIA	Freq Range (GHz)	VSWR	IL(dB)	Avg Power(W)	Length L(mm)	Flange	Material
SH-32WEMI	WR284	2.60-3.95	≤1.25	≤0.2	100	82	FDP	Al
SH-40WEMI	WR229	3.22-4.90	≤1.25	≤0.2	100	68	FDP	Al
SH-48WEMI	WR187	3.94-5.99	≤1.25	≤0.2	100	58	FDP	Al
SH-58WEMI	WR159	4.64-7.05	≤1.25	≤0.2	100	56	FDP	Al
SH-70WEMI	WR137	5.38-8.17	≤1.25	≤0.2	100	50	FDP	Cu
SH-84WEMI	WR112	6.57-9.99	≤1.25	≤0.2	50	40	FBP	Cu
SH-100WEMI	WR90	8.20-12.40	≤1.25	≤0.2	50	30.5	FBP	Cu
SH-120WEMI	WR75	9.84-15.0	≤1.25	≤0.2	50	21	FBP	Cu
SH-140WEMI	WR62	11.9-18.0	≤1.25	≤0.2	50	24	FBP	Cu
SH-180WEMI	WR51	14.5-22.0	≤1.25	≤0.2	50	25	FBP	Cu
SH-220WEMI	WR42	17.6-26.7	≤1.50	≤0.3	30	18	FBP	Cu
SH-260WEMI	WR34	21.7-33.0	≤1.50	≤0.5	30	21	FBP	Cu
SH-320WEMI	WR28	26.5-40.0	≤1.50	≤0.5	30	16	FBP	Cu

WAVEGUIDE TRANSITION

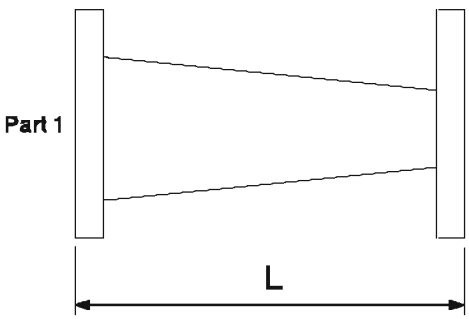


Shinhom Microwave manufactures a wide variety of waveguide transitions ranging from standard rectangular waveguide transitions in overlapping bands to custom transitions spanning multiple bands. Additional sizes, extended range, and custom design configurations are available on request.

Rectangular to Rectangular Transitions in Overlapping Bands

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR (Max)	Length (mm)	Port 1 WG Type		Port 1 WG Type		Flange	Material
				IEC	EIA	IEC	EIA		
SH-34WA...	0.35-0.49	1.10	1000	R3	WR2300	R4	WR2100	FDP/FDM	Al
SH-45WA...	0.41-0.53	1.10	1000	R4	WR2100	R5	WR1800	FDP/FDM	Al
SH-56WA...	0.49-0.62	1.10	900	R5	WR1800	R6	WR1500	FDP/FDM	Al
SH-68WA...	0.64-0.75	1.10	800	R6	WR1500	R8	WR1150	FDP/FDM	Al
SH-89WA...	0.75-0.98	1.10	600	R6	WR1150	R9	WR975	FDP/FDM	Al
SH-912WA...	0.96-1.15	1.10	500	R9	WR975	R12	WR770	FDP/FDM	Al
SH-1214WA...	1.13-1.46	1.10	400	R12	WR770	R14	WR650	FDP/FDM	Al
SH-1416WA...	1.45-1.73	1.10	350	R14	WR650	R18	WR510	FDP/FDM	Al
SH-1822WA...	1.72-2.20	1.10	300	R18	WR510	R22	WR430	FDP/FDM	Al/Cu
SH-2226WA...	2.17-2.61	1.10	250	R22	WR430	R26	WR340	FDP/FDM	Al/Cu
SH-2632WA...	2.60-3.30	1.10	200	R26	WR340	R32	WR284	FDP/FDM	Al/Cu
SH-3240WA...	3.22-3.95	1.10	200	R32	WR284	R40	WR229	FDP/FDM	Al/Cu
SH-4046WA...	3.94-4.90	1.10	180	R40	WR229	R48	WR187	FDP/FDM	Al/Cu
SH-4856WA...	4.64-5.99	1.10	180	R48	WR187	R58	WR159	FDP/FDM	Al/Cu
SH-5870WA...	5.38-7.05	1.10	150	R58	WR159	R70	WR137	FDP/FDM	Al/Cu
SH-7084WA...	6.57-8.17	1.10	130	R70	WR137	R84	WR112	FDP/FDM	Al/Cu
SH-84100WA...	8.20-9.99	1.10	100	R84	WR112	R100	WR90	FBP/FBM/FBE	Al/Cu
SH-100120WA...	9.84-12.4	1.10	80	R100	WR90	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-120140WA...	11.9-15.0	1.10	75	R120	WR75	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-140160WA...	14.5-18.0	1.10	60	R140	WR62	R180	WR51	FBP/FBM/FBE	Al/Cu
SH-160220WA...	17.6-22.0	1.10	50	R160	WR51	R220	WR42	FBP/FBM/FBE	Al/Cu
SH-220260WA...	21.7-26.7	1.15	50	R220	WR42	R260	WR34	FBP/FBM/FBE	Al/Cu
SH-260320WA...	26.3-33.0	1.15	50	R260	WR34	R320	WR28	FBP/FBM/FBE	Al/Cu
SH-320400WA...	32.9-40.0	1.15	50	R320	WR28	R400	WR22	FBP/FBM/FBE	Al/Cu
SH-400500WA...	39.2-50.1	1.20	50	R400	WR22	R500	WR19	FUGP	Cu
SH-500620WA...	49.8-58.6	1.20	50	R500	WR19	R620	WR15	FUGP	Cu
SH-620740WA...	60.5-75.8	1.20	50	R620	WR15	R740	WR12	FUGP	Cu
SH-740900WA...	73.8-91.9	1.20	50	R740	WR12	R900	WR10	FUGP	Cu



Ordering Information

Example Part No: SH - 84100 WA 100 P M A

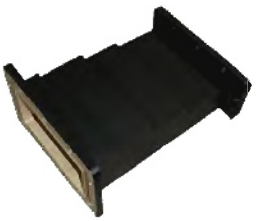
- SH: Shinhom Microwave
- 84100: WG type: R84 to R100
- WA: Product Type: WG Transition
- 100: WG Transition Length: L=100mm
- P: Flange 1 Type: P=FBP100
- M: Flange 2 Type: M=FBM84
- A: Material : A=Aluminum, C=Copper

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black/grey top coat

Special Transitions

Transitions spanning multiple bands, rectangular to circular waveguide transitions are available.

Please consult sales engineer for more information.



WAVEGUIDE TRANSITION

Rectangular to Rectangular Adapters in Overlapping Bands

ELECTRICAL CHARACTERISTICS:

Part No.	Port 1 WG Type (EIA)	Port 2 WG Type (EIA)	Freq Range (GHz)	Length (mm)	VSWR	Flange	Material
SH-912WA200	WR975	WR770	0.96-1.15	200	≤1.15	FDP	Al
SH-1214WA200	WR770	WR650	1.13-1.46	200	≤1.15	FDP	Al
SH-1418WA200	WR650	WR510	1.45-1.73	200	≤1.15	FDP	Al
SH-1822WA200	WR510	WR430	1.72-2.20	200	≤1.10	FDP	Al
SH-2226WA200	WR430	WR340	2.17-2.61	200	≤1.10	FDP	Al
SH-2632WA200	WR340	WR284	2.60-3.30	200	≤1.10	FDP	Al
SH-3240WA200	WR284	WR229	3.22-3.95	200	≤1.10	FDP	Al
SH-4048WA200	WR229	WR187	3.94-4.90	200	≤1.10	FDP	Al
SH-4858WA200	WR187	WR159	4.64-5.99	200	≤1.10	FDP	Al
SH-5870WA150	WR159	WR137	5.38-7.05	150	≤1.10	FDP	Al
SH-7084WA100	WR137	WR112	6.57-8.17	100	≤1.10	FDP/FBP	Cu
SH-84100WA60	WR112	WR90	8.20-9.99	60	≤1.10	FBP	Cu
SH-100120WA60	WR90	WR75	9.84-12.4	60	≤1.10	FBP	Cu
SH-120140WA50	WR75	WR62	11.9-15.0	50	≤1.10	FBP	Cu
SH-140180WA50	WR62	WR51	14.5-18.0	50	≤1.10	FBP	Cu
SH-180220WA50	WR51	WR42	17.6-22.0	50	≤1.10	FBP	Cu
SH-220260WA50	WR42	WR34	21.7-26.7	50	≤1.10	FBP	Cu
SH-260320WA50	WR34	WR28	26.5-33.0	50	≤1.10	FBP	Cu
SH-320400WA50	WR28	WR22	32.9-40.0	50	≤1.15	FBP/FUGP	Cu
SH-400500WA50	WR22	WR19	39.2-50.14	50	≤1.15	FUGP	Cu
SH-500620WA50	WR19	WR15	9.6-59.6	50	≤1.15	FUGP	Cu
SH-620740WA50	WR15	WR12	60.5-75.8	50	≤1.15	FUGP	Cu
SH-740900WA50	WR12	WR10	73.8-91.9	50	≤1.15	FUGP	Cu
SH-9001200WA30	WR10	WR8	92.2-112	30	–	FUGP	Cu
SH-12001400WA30	WR8	WR7	113-140	30	–	FUGP	Cu
SH-14001800WA30	WR7	WR5	145-173	30	–	FUGP	Cu
SH-18002200WA30	WR5	WR4	172-220	30	–	FUGP	Cu
SH-22002600WA30	WR4	WR3	217-261	30	–	FUGP	Cu

WAVEGUIDE TRANSITION

Rectangular to Circular Waveguide Transition (TE10–TE11)

ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	Length(mm)	VSWR	WG Type EIA	Inner Diameter of Circular Waveguide(mm)	Material
SH–14RCA157	1.30–1.70	920	≤1.10	WR650	157	Al
SH–18RCA114.58	1.76–2.20	820	≤1.10	WR510	114.58	Al
SH–22RCA97.87	2.07–2.61	580	≤1.10	WR430	97.87	Al
SH–26RCA83.62	2.42–3.30	500	≤1.10	WR340	83.62	Al
SH–32RCA71.42	2.83–3.66	420	≤1.10	WR284	71.62	Al
SH–40RCA51.99	3.22–4.90	350	≤1.10	WR229	51.99	Al
SH–48RCA44.45	3.94–5.33	300	≤1.10	WR187	44.45	Al
SH–58RCA38.1	5.3–7.05	230	≤1.10	WR159	38.1	Al
SH–70RCA32.537	6.21–8.17	200	≤1.10	WR137	32.537	Al
SH–84RCA27.788	7.30–9.97	200	≤1.10	WR112	27.788	Al
SH–100RCA23.825	8.50–11.6	160	≤1.10	WR90	23.825	Cu
SH–120RCA17.415	11.6–15.0	130	≤1.10	WR75	17.415	Cu
SH–140RCA15.086	13.4–18.0	100	≤1.10	WR62	15.086	Cu
SH–180RCA12.7	15.9–21.8	100	≤1.15	WR51	12.7	Cu
SH–220RCA9.525	21.2–26.7	80	≤1.15	WR42	9.525	Cu
SH–260RCA8.331	24.3–33.0	60	≤1.15	WR34	8.331	Cu
SH–320RCA7.137	31.8–40	50	≤1.15	WR28	7.137	Cu
SH–400RCA5.563	36.4–49.8	50	≤1.15	WR22	5.563	Cu
SH–500RCA4.369	46.3–59.6	40	≤1.15	WR19	4.369	Cu
SH–620RCA3.581	56.6–75.8	30	≤1.15	WR15	3.581	Cu
SH–740RCA3.175	63.5–87.2	30	≤1.15	WR12	3.175	Cu
SH–900RCA2.388	84.8–112	20	≤1.15	WR10	2.388	Cu

WAVEGUIDE TWIST

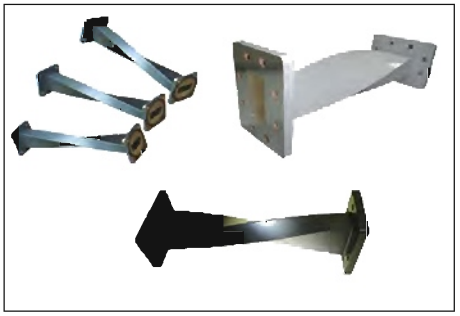
Rectangular Twist Waveguide

ELECTRICAL CHARACTERISTICS:

Part No.	WG Type (EIA)	Freq Range (GHz)	VSWR	Standard Length(mm)	Shortest Length(mm)	Flange	Material
SH-22WTA...PM	WR430	1.72-2.61	≤1.10	400	150	FDP/FDM	Al
SH-26WTA...PM	WR340	2.17-3.30	≤1.10	400	140	FDP/FDM	Al
SH-32WTA...PM	WR284	2.60-3.95	≤1.10	300	120	FDP/FDM	Al
SH-40WTA..PM	WR229	3.22-4.90	≤1.10	200	90	FDP/FDM	Al
SH-48WTA...PM	WR187	3.94-5.99	≤1.10	200	70	FDP/FDM	Al
SH-58WTA..PM	WR159	4.64-7.05	≤1.10	200	70	FDP/FDM	Al
SH-70WTA...PM	WR137	5.38-8.17	≤1.10	100	60	FDP/FDM	Cu
SH-84WTA..PM	WR112	6.57-9.99	≤1.10	100	50	FBP/FBM	Cu
SH-100WTA...PM	WR90	8.20-12.40	≤1.10	100	45	FBP/FBM	Cu
SH-120WTA...PM	WR75	9.84-15.0	≤1.10	100	40	FBP/FBM	Cu
SH-140WTA...PM	WR62	11.9-18.0	≤1.10	100	40	FBP/FBM	Cu
SH-180WTA..PM	WR51	14.5-22.0	≤1.10	50	35	FBP/FBM	Cu
SH-220WTA...PM	WR42	17.6-26.7	≤1.10	60	35	FBP/FBM	Cu
SH-260WTA...PM	WR34	21.7-33.0	≤1.10	60	35	FBP/FBM	Cu
SH-320WTA...PM	WR28	26.5-40.0	≤1.10	60	30	FBP/FBM	Cu
SH-400WTA...	WR22	32.9-50.1	≤1.15	50	30	FUGP	Cu
SH-500WTA...	WR19	39.2-59.6	≤1.15	50	30	FUGP	Cu
SH-620WTA...	WR15	49.8-75.8	≤1.15	50	25	FUGP	Cu
SH-740WTA...	WR12	60.5-91.9	≤1.15	50	25	FUGP	Cu
SH-900WTA...	WR10	73.8-112	≤1.15	50	25	FUGP	Cu

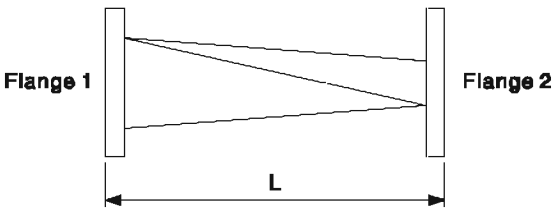
WAVEGUIDE TWIST

Shinhom Microwave offers a standard product line of waveguide twist covering waveguide sizes WR10 thru WR430. Twist angle, twist direction and flange types can be custom made as per customer' s specific requirements.



ELECTRICAL CHARACTERISTICS:

Part No.	Freq Range (GHz)	VSWR (Max)	Minimum Length (mm)	WG type		Flange	Material
				IEC	EIA		
SH-22WTA...	1.72-2.61	1.10	800	R22	WR430	FDP/FDM	Al/Cu
SH-26WTA...	2.17-3.30	1.10	400	R26	WR340	FDP/FDM	Al/Cu
SH-32WTA...	2.60-3.95	1.10	300	R32	WR284	FDP/FDM	Al/Cu
SH-40WTA...	3.22-4.90	1.10	250	R40	WR229	FDP/FDM	Al/Cu
SH-48WTA...	3.94-5.99	1.10	200	R48	WR187	FDP/FDM	Al/Cu
SH-58WTA...	4.64-7.05	1.10	170	R58	WR159	FDP/FDM	Al/Cu
SH-70WTA...	5.38-8.17	1.10	150	R70	WR137	FDP/FDM	Al/Cu
SH-84WTA...	6.57-9.99	1.10	120	R84	WR112	FBP/FBM/FBE	Al/Cu
SH-100WTA...	8.20-12.40	1.10	60	R100	WR90	FBP/FBM/FBE	Al/Cu
SH-120WTA...	9.84-15.0	1.10	60	R120	WR75	FBP/FBM/FBE	Al/Cu
SH-140WTA...	11.9-18.0	1.10	50	R140	WR62	FBP/FBM/FBE	Al/Cu
SH-180WTA...	14.5-22.0	1.10	50	R180	WR51	FBP/FBM/FBE	Al/Cu
SH-220WTA...	17.6-26.7	1.10	50	R220	WR42	FBP/FBM/FBE	Al/Cu
SH-260WTA...	21.7-33.0	1.15	50	R260	WR34	FBP/FBM/FBE	Al/Cu
SH-320WTA...	26.3-40.0	1.15	50	R320	WR28	FBP/FBM/FBE	Al/Cu
SH-400WTA...	32.9-60.1	1.15	50	R400	WR22	FUGP	Cu
SH-500WTA...	39.2-59.6	1.15	50	R500	WR19	FUGP	Cu
SH-620WTA...	49.8-75.8	1.15	50	R620	WR15	FUGP	Cu
SH-740WTA...	60.5-91.9	1.15	50	R740	WR12	FUGP	Cu
SH-900WTA...	73.8-112	1.15	50	R900	WR10	FUGP	Cu



Ordering Information

Example Part No: SH – 100 WTA 100 P M A 45

- SH: Shinhom Microwave
- 100: WG type:R100
- WTA: Product Type: WG Twist
- 100: Twist WG Length: L=100mm
- P: Flange 1 Type: P=FBP100
- M: Flange 2 Type: M=FBM100
- A: Material : A=Aluminum C=Copper
- 45: Twisting Angle:45° (90° as default)

- Flange type: Multiple types available – see Shinhom Microwave Flanges page
- Finish: Corrosion protection plus black/grey top coat
- Twist angle other than 90° available on request
- Twist direction option of Shinhom Microwave unless otherwise specified