

MAGNETIC SHIELDED SURFACE-MOUNT POWER INDUCTORS

SDRH12 SERIES



FEATURES:

- Magnetically Shielded Structure
- Low DC Resistance
- Large current up to 12A
- Excellent Mechanical Strength
- High Reliability and Excellent Solderability
- Low and square Profile
- High heat resistance

COMMON APPLICATIONS:

- VCRs, Notebook, DC/DC Converters
- Video Digital Cameras
- Communication System
- Automotive Systems Power supplier
- LCD PDP Televisions
- Hard Disk Drives, Topset, XDSL
- Network Systems
- Computer Peripheral Equipment

ELECTRICAL CHARACTERISTICS@25°C

Inductance		DC Resistance(Ω) ± 30%			DC saturation allowable current(A) Typ.			Temp. rise allowable current(A) Typ.		
Code	uH	SDRH1242	SDRH1257	SDRH1277	SDRH1242	SDRH1257	SDRH1277	SDRH1242	SDRH1257	SDRH1277
1R3	1.3	0.006			12.0			6.80		
2R2	2.2	0.008	0.006	0.007	9.00	11.4	11.6	5.95	6.80	6.85
3R3	3.3	0.010	0.008	0.008	7.20	9.40	10.0	5.30	5.70	6.00
4R3	4.3		0.009	0.010		8.10	9.40		5.45	5.60
4R7	4.7	0.012			6.60			4.85		
5R6	5.6		0.011	0.011		7.10	8.50		5.00	5.30
6R2	6.2	0.014			5.40			4.50		
7R5	7.5	0.016	0.012	0.013	4.90	6.20	7.40	4.20	4.70	4.80
100	10	0.021	0.017	0.014	4.50	5.60	6.30	3.60	4.00	4.30
120	12	0.026	0.022	0.016	4.00	5.00	6.00	3.30	3.70	4.15
150	15	0.029	0.026	0.019	3.60	4.40	4.90	3.10	3.30	3.85
180	18	0.038	0.029	0.021	3.10	4.00	4.60	2.70	2.95	3.70
220	22	0.045	0.033	0.024	2.80	3.70	4.30	2.50	2.65	3.25
270	27	0.056	0.043	0.030	2.55	3.20	4.00	2.20	2.55	3.00
330	33	0.065	0.053	0.035	2.25	2.95	3.25	1.95	2.30	2.85
390	39	0.084	0.056	0.046	2.10	2.75	2.85	1.75	2.20	2.50
470	47	0.10	0.069	0.051	1.82	2.50	2.65	1.65	1.95	2.30
560	56	0.12	0.08	0.062	1.75	2.30	2.50	1.44	1.80	2.10
680	68	0.14	0.10	0.077	1.65	2.05	2.40	1.35	1.60	1.90
820	82	0.16	0.13	0.09	1.48	1.85	2.35	1.23	1.40	1.80
101	100	0.20	0.14	0.11	1.33	1.65	2.20	1.15	1.30	1.60
121	120	0.23	0.18	0.13	1.24	1.50	1.90	1.02	1.20	1.40
151	150	0.29	0.23	0.18	1.05	1.35	1.60	0.92	1.05	1.20
181	180	0.35	0.26	0.19	0.98	1.20	1.45	0.82	1.00	1.15
221	220	0.45	0.32	0.24	0.93	1.10	1.35	0.73	0.88	1.05
271	270	0.55	0.38	0.31	0.82	1.00	1.25	0.66	0.81	0.91
331	330	0.67	0.47	0.34	0.70	0.90	1.00	0.59	0.70	0.88
391	390	0.82	0.54	0.40	0.65	0.80	0.90	0.52	0.67	0.80
471	470	0.92	0.66	0.51	0.58	0.75	0.80	0.48	0.61	0.70
561	560	1.10	0.79	0.56	0.54	0.70	0.73	0.45	0.54	0.65
681	680	1.37	0.95	0.73	0.51	0.65	0.68	0.40	0.50	0.60
821	820	1.67	1.15	0.87	0.45	0.55	0.62	0.36	0.44	0.55
102	1000	1.87	1.42	1.07	0.43	0.50	0.60	0.34	0.40	0.50

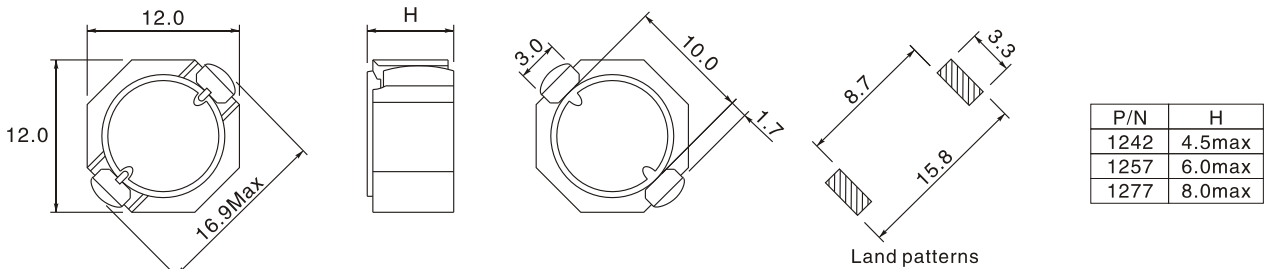
- Measurement frequency for inductance: 100KHz
- DC saturation allowable current: value of inductance decrease within 30%
- Temperature rise allowable current: A rise in temperature of core surface is within 40°C
- Inductor Testing: HP4284A (Equivalent acceptable)
DCR:QuadTech 1880 Milliohmeter Q- HP4342A – SRF-HP4191A IDCMax
- Operating temperature: -40°C to +105°C
- Storage temperature: -40°C to +105°C

Tolerance	SDRH1242	SDRH1257	SDRH1277
± 30%(N)	1.3-7.5uH	2.2-7.5uH	2.2-7.5uH
± 20%(M)	10~1000uH		

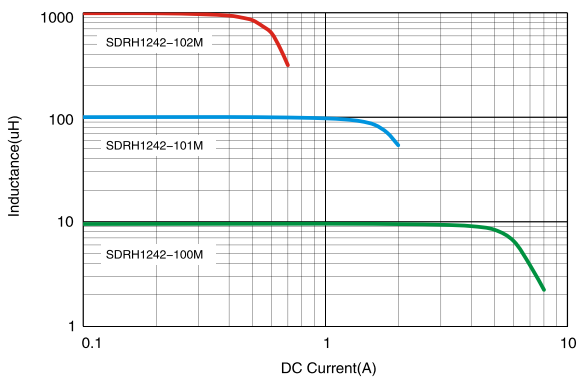
SDRH12 Seires

PHYSICAL CHARACTERISTICS & TECHNICAL INFORMATION

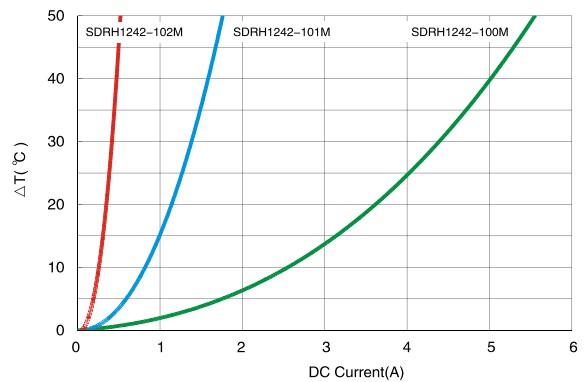
Dimensions(mm)



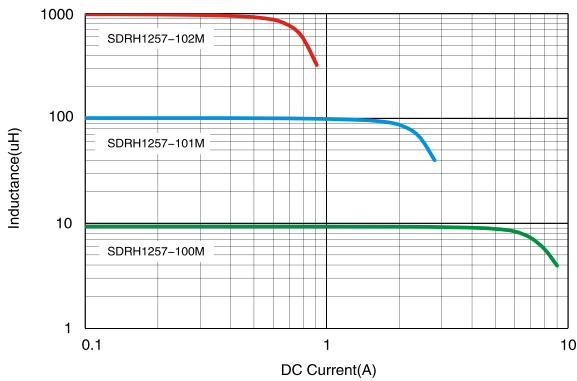
Characteristics of DC Superposition



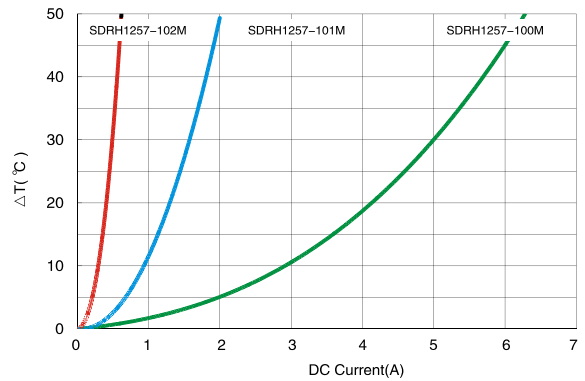
Characteristics of Temperature rise



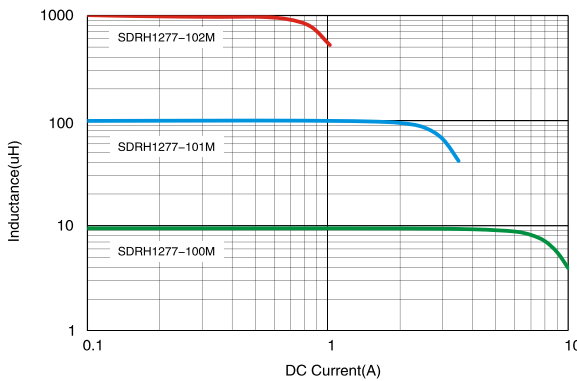
Characteristics of DC Superposition



Characteristics of Temperature rise



Characteristics of DC Superposition



Characteristics of Temperature rise

