



HIGH CURRENT POWER INDUCTORS

HCB1007 SERIES

FEATURES:

- High current carrying capacity
- Low core loss
- Inductance range from 115nH to 470nH
- Current range from 23.5A to 94A
- Ferrite core material

OPTIONS:

- Tape & Reel is Standard
- Bulk packaging Available for Smaller Quantities

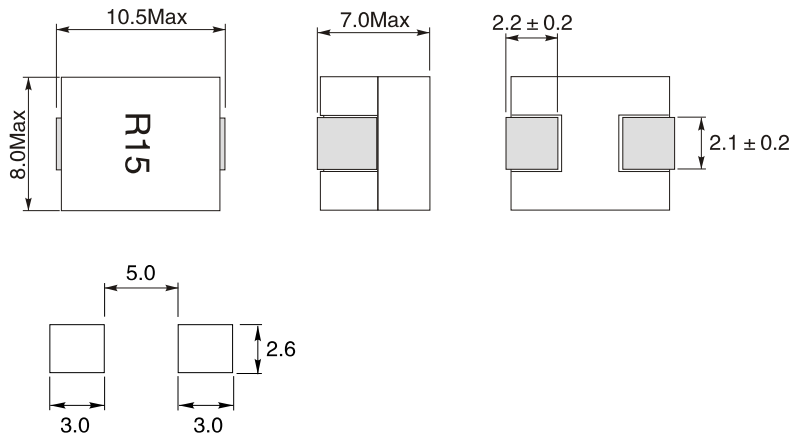
APPLICATIONS:

- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module(VRM)

ELECTRICAL CHARACTERISTICS:

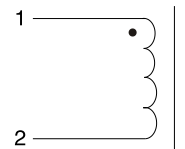
Part Number	Inductance (nH) ± 10% @0A _{dc}	Inductance (nH)Min @ Isat1	Heat rating current DC Amps I _{rms} (A)	Saturation current DC Amps Isat1(A)	Saturation current DC Amps Isat2(A)	DCR@25 °C (mΩ)
HCB1007R1-R11K	115	83	61	94	86	0.29 ± 5%
HCB1007R1-R15K	150	108	61	75	60	0.29 ± 5%
HCB1007R1-R18K	180	129	61	60	50	0.29 ± 5%
HCB1007R1-R22K	220	158	61	50	40	0.29 ± 5%
HCB1007R1-R27K	270	194	61	41	33	0.29 ± 5%
HCB1007R1-R30K	300	216	61	35	30	0.29 ± 5%
HCB1007R1-R33K	330	237	61	33	26.5	0.29 ± 5%
HCB1007R1-R39K	390	280	61	28	22.5	0.29 ± 5%
HCB1007R1-R47K	470	338	61	23.5	19	0.29 ± 5%

DIMENSIONS(mm) :



Recommended pad layout

SCHEMATIC :



NOTES:

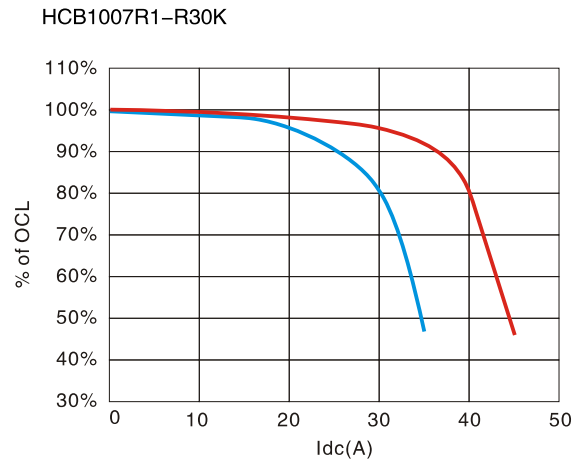
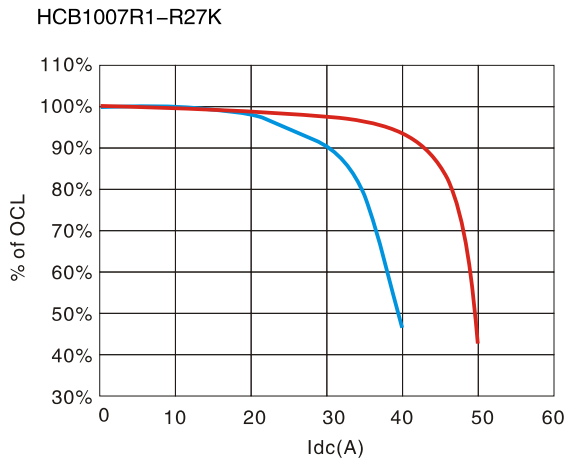
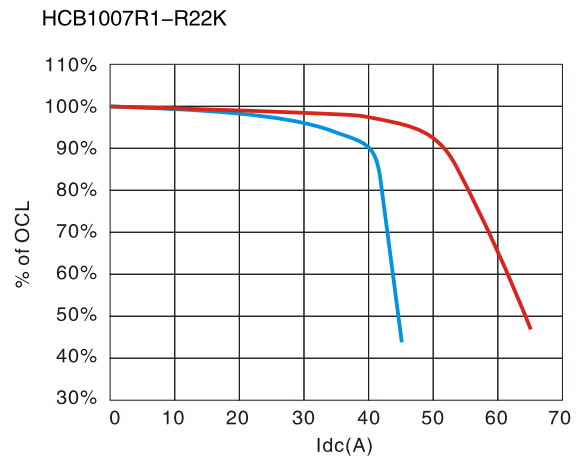
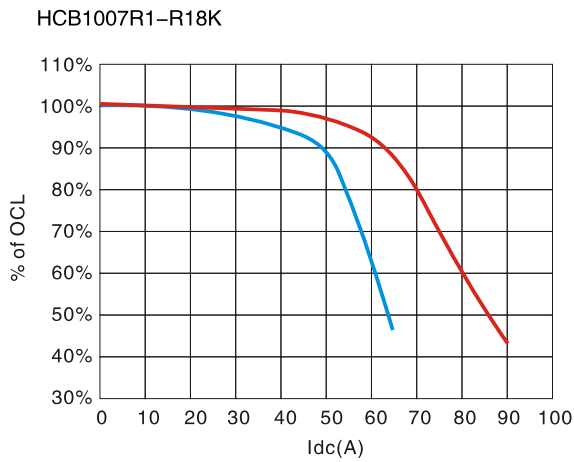
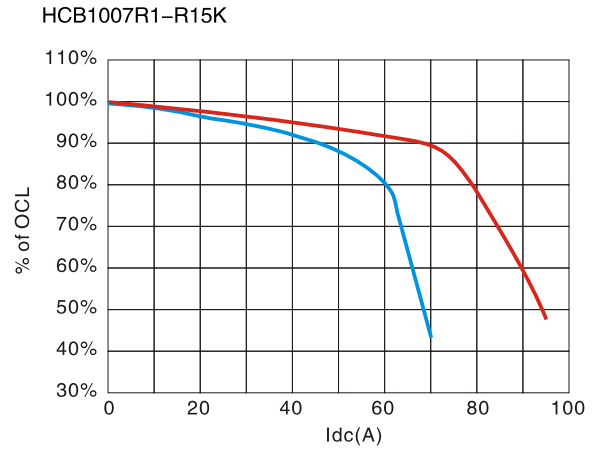
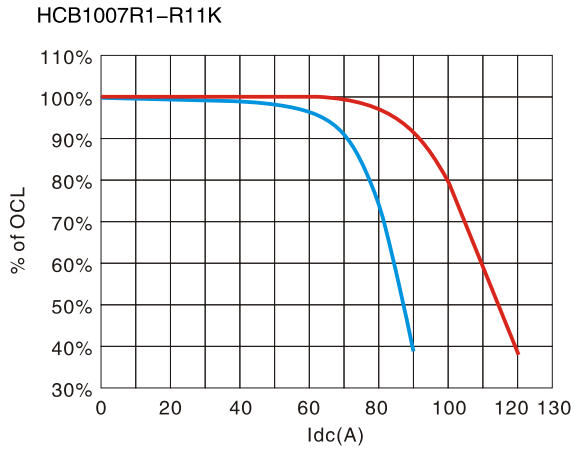
- Test Frequency : 100KHz / 0.1V@25°C
- I_{rms}: DC current for an approximate temperature rise of 40°C without core loss
- Isat1: Peak current for approximately 20% rolloff at +25°C
- Isat2: Peak current for approximately 20% rolloff at +125°C
- Operating temperature: -40°C to +125°C(ambient plus self-temperature rise)
- Storage temperature: -40°C to +125°C



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INDUCTANCE CHARACTERISTICS:



— +25°C — +125°C

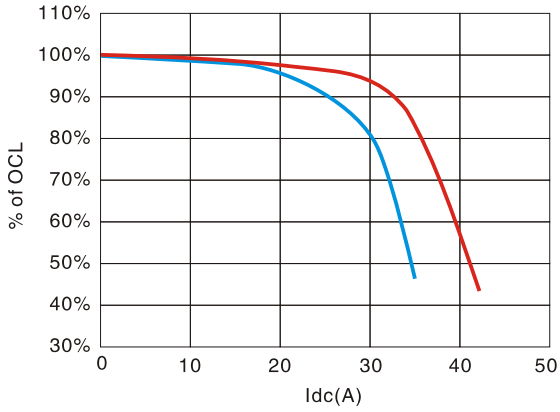


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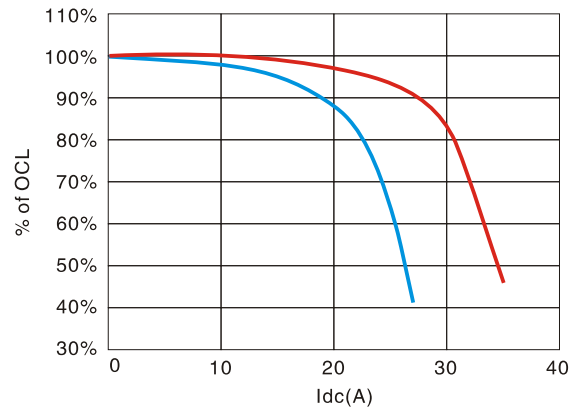
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INDUCTANCE CHARACTERISTICS:

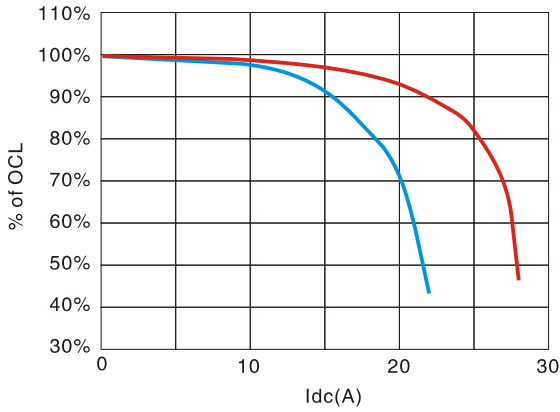
HCB1007R1-R33K



HCB1007R1-R39K



HCB1007R1-R47K



— +25°C — +125°C