

SMD Power Inductor CDRR94A



Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 12.9 × 9.4 × 5.0mm Max.
- Product weight: 1.0g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

Environmental Data

- Operating temperature range: -40°C~+100°C (including coil's self temperature rise)
- Storage temperature range: -40°C~+100°C
- Solder reflow temperature: 260 °C peak.

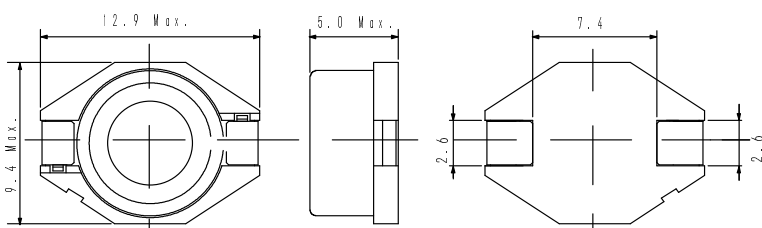
Packaging

- Carrier tape and reel packaging.
- 12.9" diameter reel
- 500pcs per reel

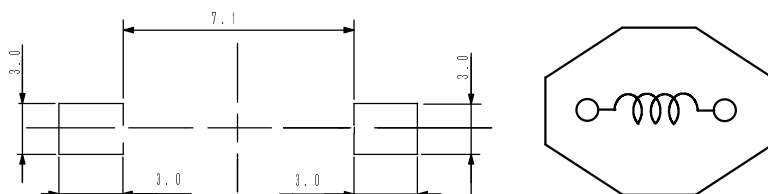
Applications

- Ideally used in Portable Computers, Video Recorder, DSC/DVC, etc as DC-DC Converter inductors.

Dimension - [mm]



Land pattern and Schematics - [mm]



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Electrical Characteristics

Part Name	Stamp	Inductance (μ H) [within] ※1	D.C.R. (m Ω) Max. (Typ.) (at 20°C)	Saturation Current (A) ※2	Temperature Rise Current (A) ※3
CDRR94ANP-1R0PC	1R0	1.0 $\pm$ 25%	15.2(12.2)	7.60	5.20
CDRR94ANP-1R5MC	1R5	1.5 $\pm$ 20%	17.0(13.6)	6.24	4.80
CDRR94ANP-2R2MC	2R2	2.2 $\pm$ 20%	19.3(15.4)	5.44	4.60
CDRR94ANP-3R3MC	3R3	3.3 $\pm$ 20%	23.4(18.7)	4.32	3.80
CDRR94ANP-4R7MC	4R7	4.7 $\pm$ 20%	28.4(22.7)	3.52	3.70
CDRR94ANP-6R8MC	6R8	6.8 $\pm$ 20%	34.0(27.2)	2.98	3.30
CDRR94ANP-100MC	100	10 $\pm$ 20%	51.2(41.0)	2.48	2.50
CDRR94ANP-120MC	120	12 $\pm$ 20%	58.3(46.6)	2.24	2.25
CDRR94ANP-150MC	150	15 $\pm$ 20%	65.7(52.6)	1.96	2.25
CDRR94ANP-180MC	180	18 $\pm$ 20%	73.1(58.5)	1.88	2.12
CDRR94ANP-220MC	220	22 $\pm$ 20%	95.6(76.5)	1.66	1.72
CDRR94ANP-270MC	270	27 $\pm$ 20%	112.0(89.6)	1.56	1.60
CDRR94ANP-330MC	330	33 $\pm$ 20%	143.9(115.1)	1.36	1.41
CDRR94ANP-390MC	390	39 $\pm$ 20%	164.2(131.4)	1.26	1.34
CDRR94ANP-470MC	470	47 $\pm$ 20%	178.1(142.5)	1.12	1.32
CDRR94ANP-560MC	560	56 $\pm$ 20%	224.7(179.7)	1.00	1.13
CDRR94ANP-680MC	680	68 $\pm$ 15%	312.0(250.0)	0.85	0.87
CDRR94ANP-820MC	820	82 $\pm$ 20%	341.9(273.5)	0.85	0.83
CDRR94ANP-101MC	101	100 $\pm$ 20%	406.7(325.4)	0.80	0.76
CDRR94ANP-121MC	121	120 $\pm$ 20%	526.8(421.4)	0.71	0.64
CDRR94ANP-151MC	151	150 $\pm$ 20%	708.3(566.6)	0.65	0.55
CDRR94ANP-181MC	181	180 $\pm$ 20%	784.8(627.8)	0.60	0.54
CDRR94ANP-221MC	221	220 $\pm$ 20%	1043.3(834.6)	0.54	0.45
CDRR94ANP-271MC	271	270 $\pm$ 20%	1174.8(939.8)	0.49	0.43
CDRR94ANP-331MC	331	330 $\pm$ 20%	1353.5(1082.8)	0.44	0.38

※1. Inductance measuring condition: at 100 kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 90% of it's nominal value.

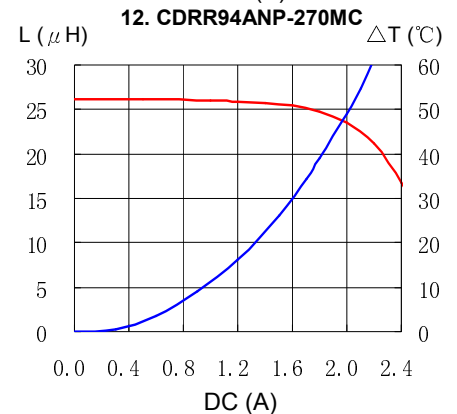
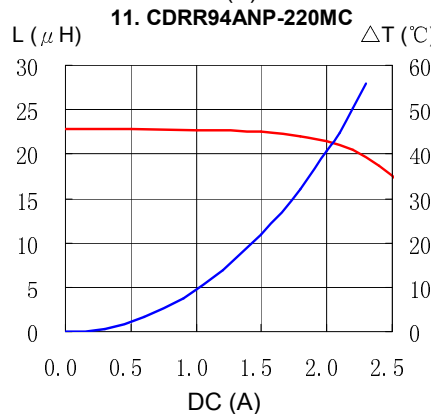
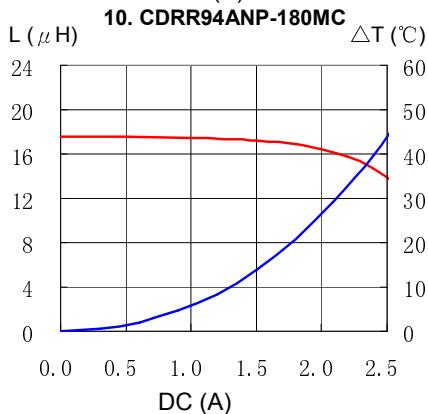
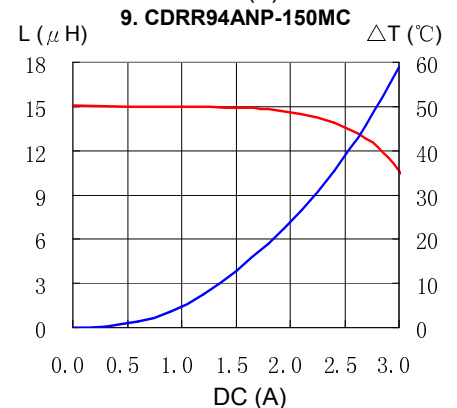
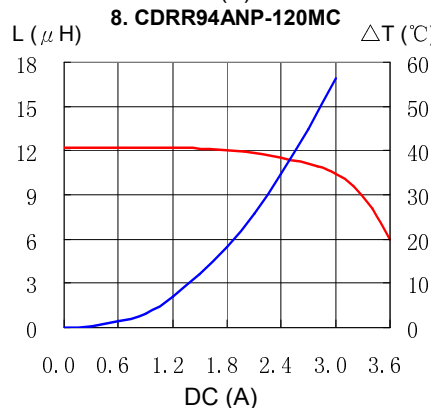
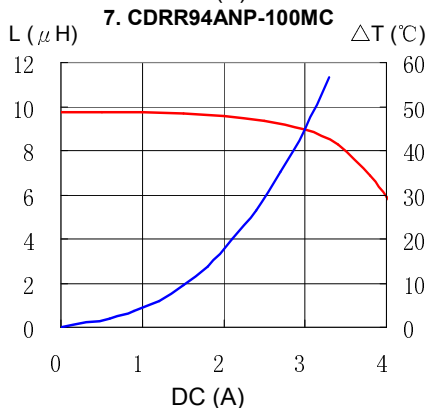
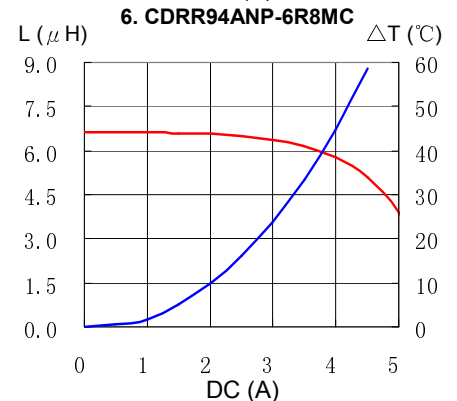
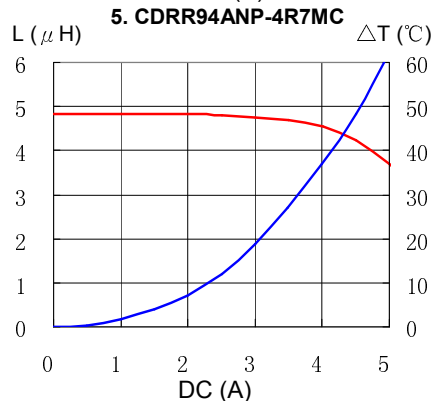
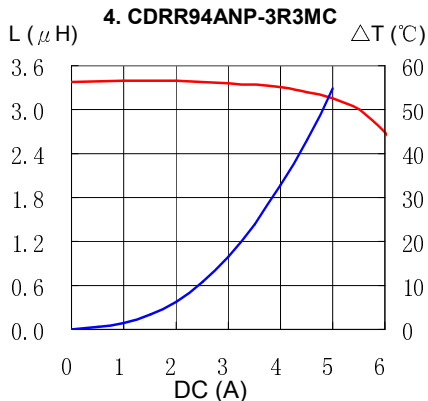
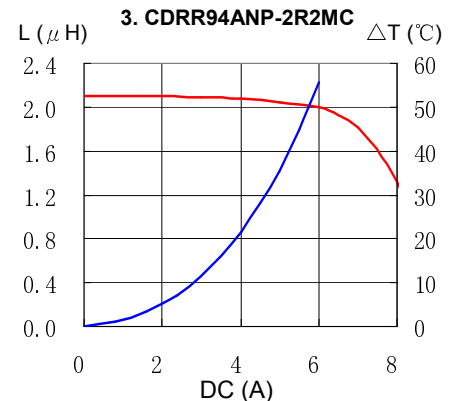
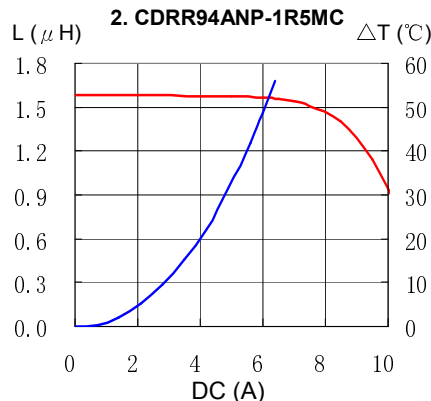
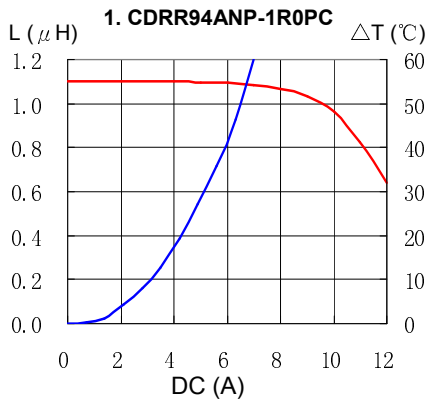
※3. Temperature rise current: The value of D.C. current when the temperature rise is $\Delta t=40^{\circ}\text{C}$ ($T_a=20^{\circ}\text{C}$).

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Saturation Current & Temperature Rise Graph

— L (20°C) — ΔT



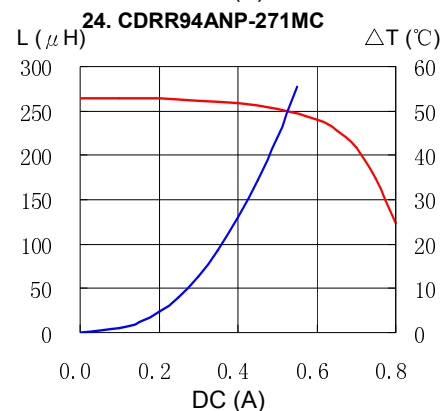
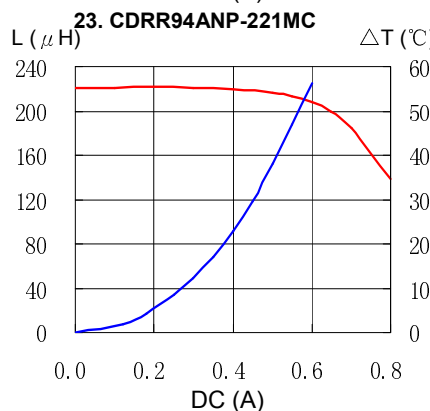
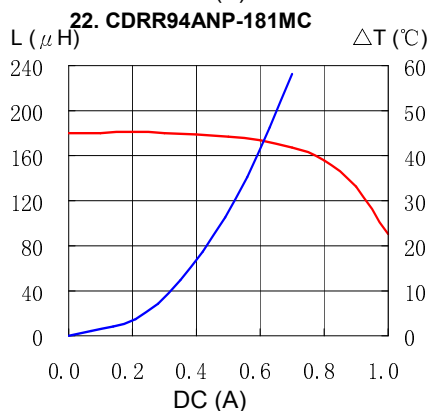
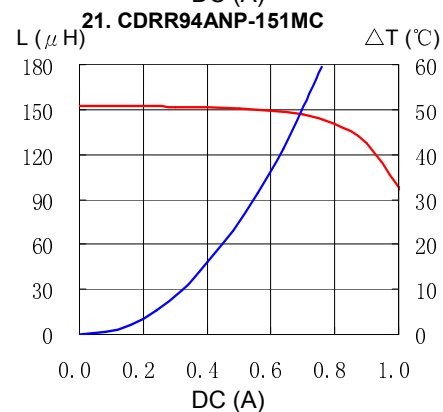
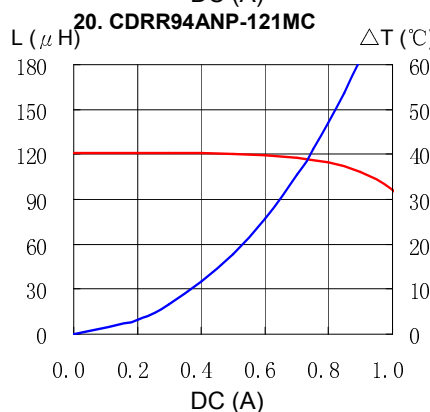
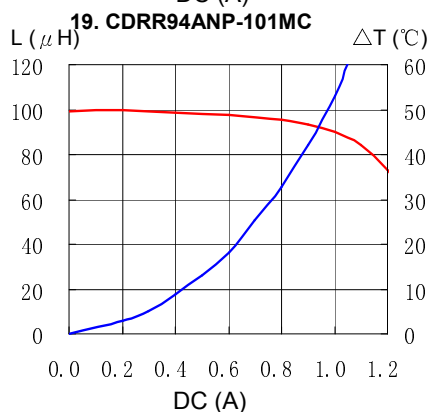
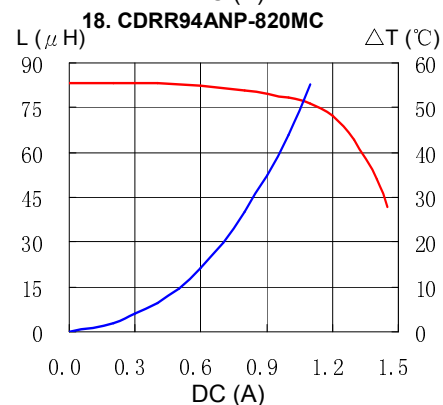
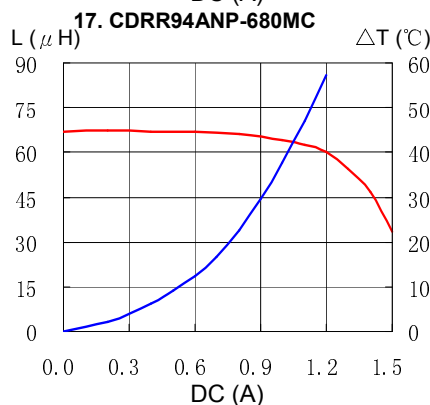
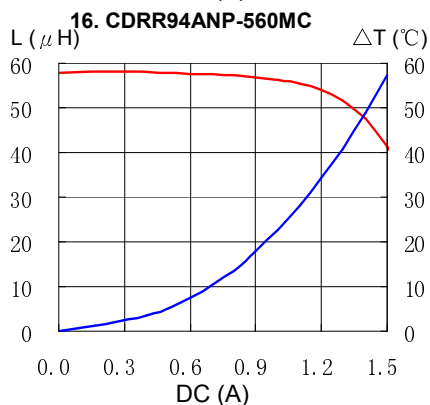
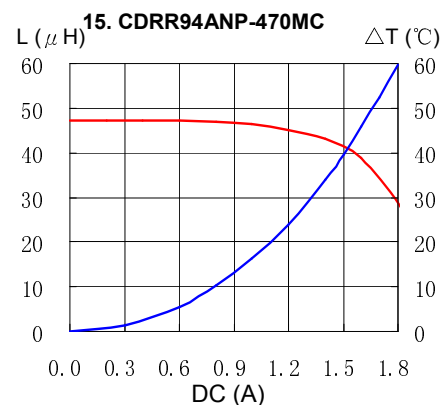
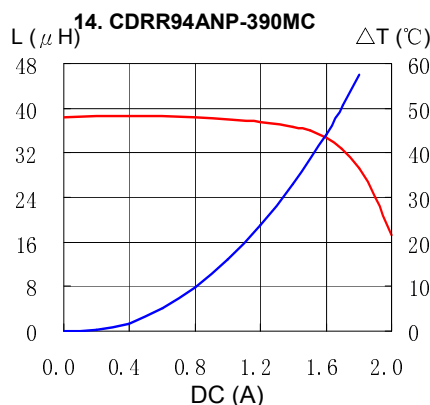


13. CDRR94ANP-330MC

Y-axis: $L (\mu H)$ (0 to 36) and $\Delta T (^{\circ}C)$ (0 to 60). X-axis: DC (A) (0.0 to 2.0).

The graph shows two curves: a blue curve for inductance L and a red curve for temperature rise ΔT .

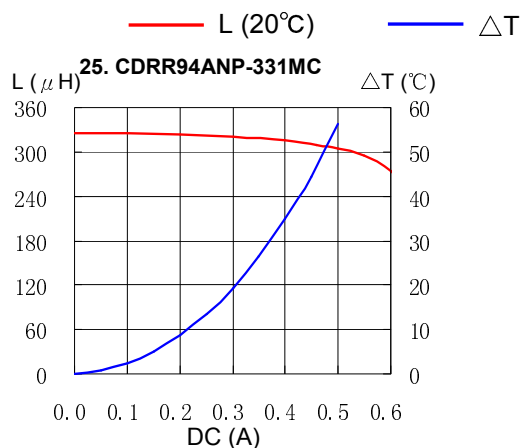
DC (A)	$L (\mu H)$	$\Delta T (^{\circ}C)$
0.0	0	55
0.4	1	55
0.8	5	54
1.2	12	53
1.6	24	50
2.0	36	40



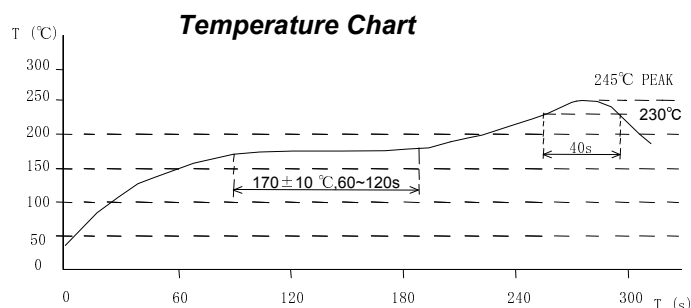
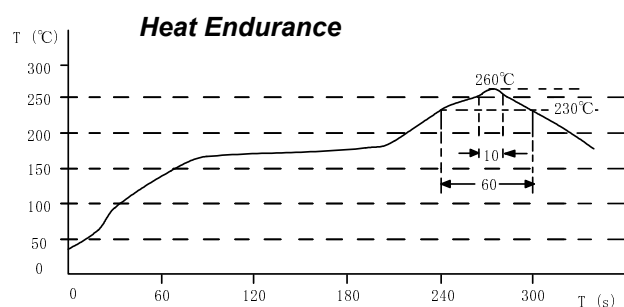
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Saturation Current & Temperature Rise Graph



Solder Reflow Condition



Please refer to the sales offices on our website - <http://www.sumida.com>

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