

- Ferrite drum core construction.
- Magnetically shielded.
- L x W x H: 12.5 x 12.5 x 8.0 mm Max.
- Product weight 4.1g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Qualification to AEC-Q200.

Figure 1: Dimensions of the package. The figure shows three views of a square package: a top view, a side view, and a bottom view. The top view shows a square package with a central circular area and four terminals. Dimensions include 12.0 ± 0.5 for the side length, 12.0 ± 0.5 for the central circle diameter, and MAX. 17.6 for the diagonal. The side view shows a height of 11.0 ± 0.5 and a maximum width of 8.0 (typical 7.8). The bottom view shows a square package with a central circular area and four terminals. Dimensions include 11.0 ± 0.5 for the side length, 4.8 ± 0.5 for the central circle diameter, 2.35 ± 0.3 for the terminal width, 1.0 ± 0.5 for the terminal height, 2.4 ± 0.3 for the terminal thickness, 14.1 ± 0.5 for the diagonal, and 9.3 for the distance from the center to the terminal. A legend indicates that the shaded area represents the terminal.

$$(10 \mu\text{H} \sim 18 \mu\text{H})$$
$$(22 \mu\text{H} \sim 390 \mu\text{H})$$

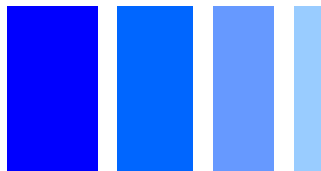
- Operating temperature range: -40°C~+125°C (including coil's self temperature rise)
- Storage temperature range: -40°C~+85°C
- Solder reflow temperature: 260 °C peak.

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

- Automotive and other high temperature, high reliability application.

SMD Power Inductor

CDRH12D78/A



Electrical Characteristics

Part name	Stamp	Inductance (μ H) [within] ※1	D.C.R. (m Ω) [Max.].(Typ.) (at 20°C)	Rated current (A) (at 125°C) ※2
CDRH12D78/ANP-100MC	100M	10 μ H $\pm$ 20%	22(17)	4.2
CDRH12D78/ANP-120MC	120M	12 μ H $\pm$ 20%	24(19)	4.0
CDRH12D78/ANP-150MC	150M	15 μ H $\pm$ 20%	27(21)	3.7
CDRH12D78/ANP-180MC	180M	18 μ H $\pm$ 20%	29(23)	3.4
CDRH12D78/ANP-220MC	220M	22 μ H $\pm$ 20%	44(35)	2.9
CDRH12D78/ANP-270MC	270M	27 μ H $\pm$ 20%	47(37)	2.7
CDRH12D78/ANP-330MC	330M	33 μ H $\pm$ 20%	64(51)	2.4
CDRH12D78/ANP-390MC	390M	39 μ H $\pm$ 20%	68(54)	2.3
CDRH12D78/ANP-470MC	470M	47 μ H $\pm$ 20%	75(60)	2.1
CDRH12D78/ANP-560MC	560M	56 μ H $\pm$ 20%	84(67)	1.9
CDRH12D78/ANP-680MC	680M	68 μ H $\pm$ 20%	97(77)	1.7
CDRH12D78/ANP-820MC	820M	82 μ H $\pm$ 20%	124(99)	1.6
CDRH12D78/ANP-101MC	101M	100 μ H $\pm$ 20%	152(121)	1.4
CDRH12D78/ANP-121MC	121M	120 μ H $\pm$ 20%	197(157)	1.3
CDRH12D78/ANP-151MC	151M	150 μ H $\pm$ 20%	249(199)	1.2
CDRH12D78/ANP-181MC	181M	180 μ H $\pm$ 20%	270(216)	1.1
CDRH12D78/ANP-221MC	221M	220 μ H $\pm$ 20%	308(246)	1.0
CDRH12D78/ANP-271MC	271M	270 μ H $\pm$ 20%	448(358)	0.86
CDRH12D78/ANP-331MC	331M	330 μ H $\pm$ 20%	579(463)	0.75
CDRH12D78/ANP-391MC	391M	390 μ H $\pm$ 20%	730(584)	0.66

※1. Measuring condition: at 100 kHz.

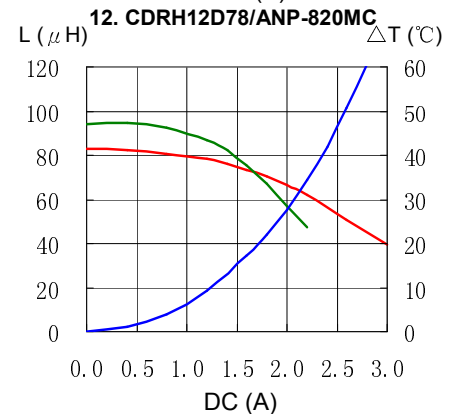
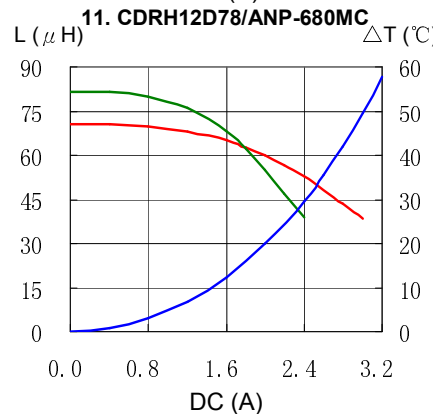
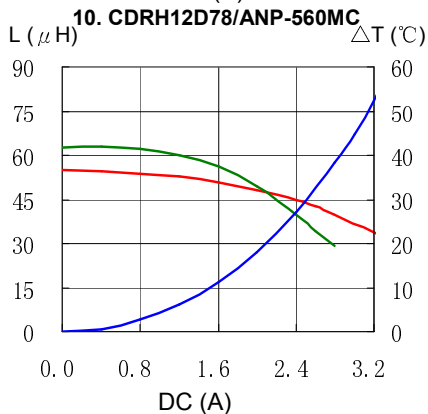
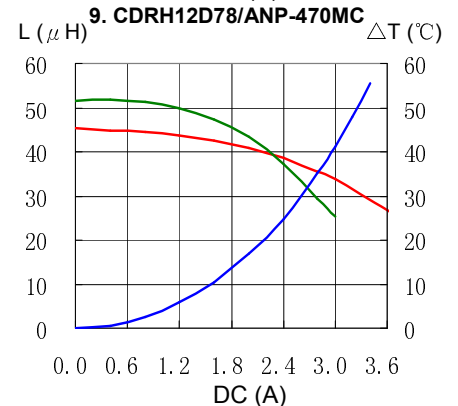
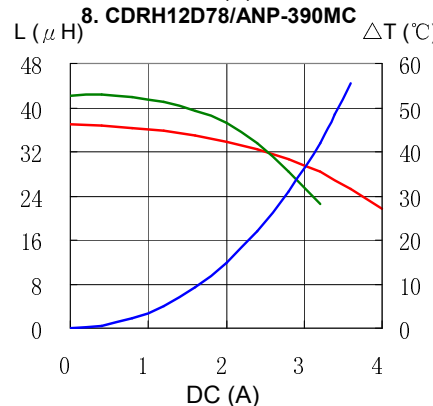
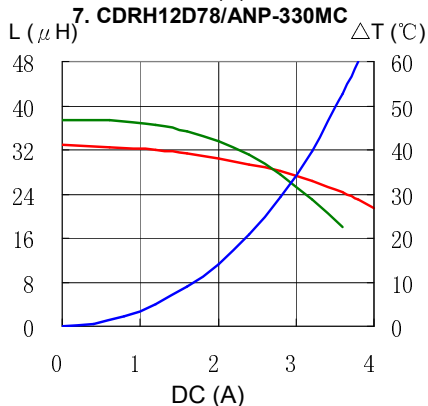
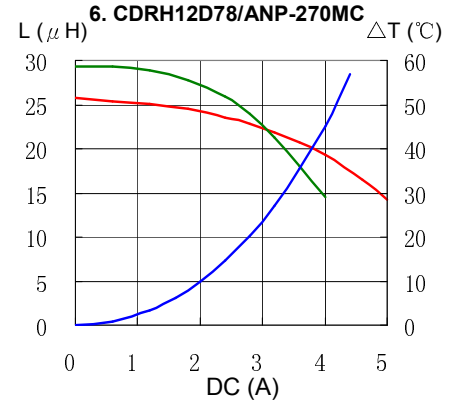
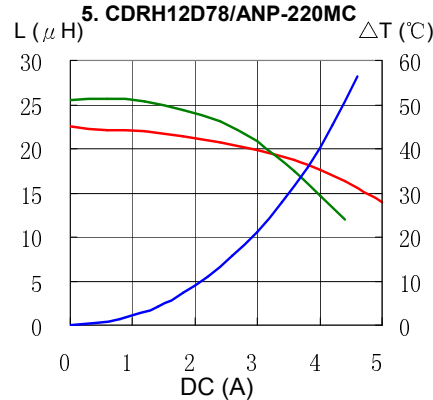
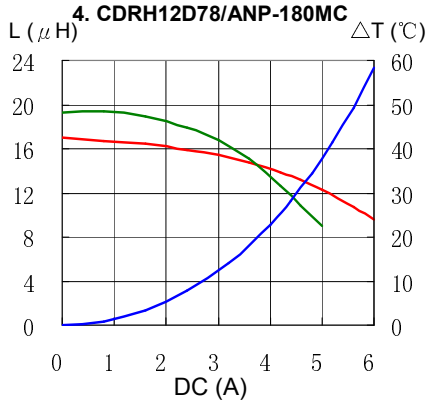
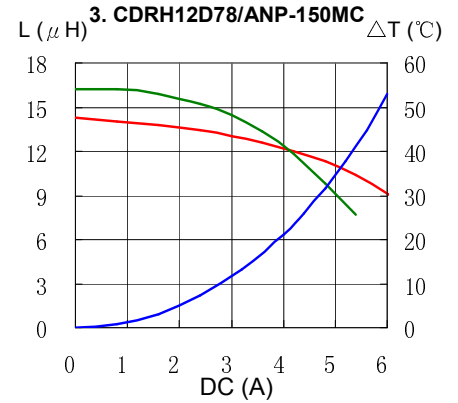
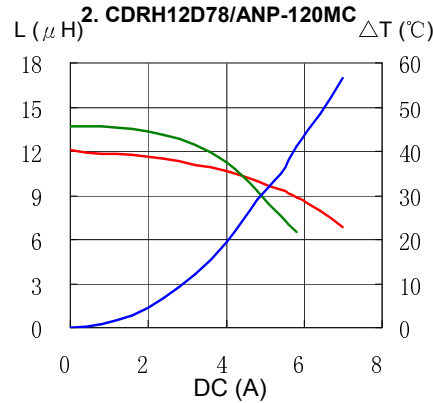
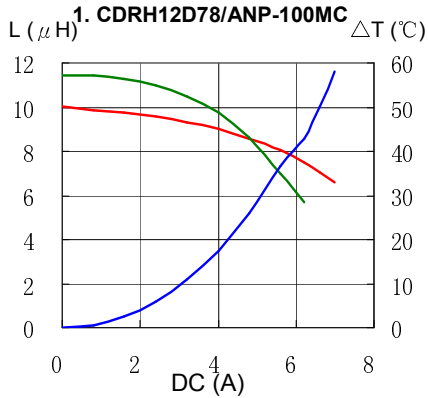
※2. Rated current: The DC current at which the inductance decreases to 65% of its nominal value or when $\Delta t=30^{\circ}\text{C}$, whichever is lower .

SMD Power Inductor CDRH12D78/A



Saturation Current & Temperature Rise Graph

— L (20°C) — L (125°C) — ΔT

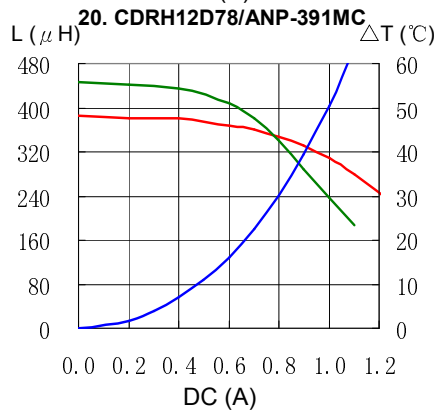
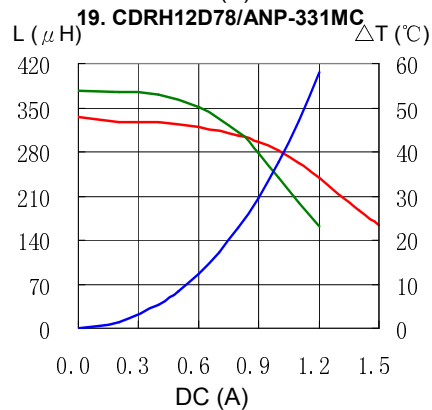
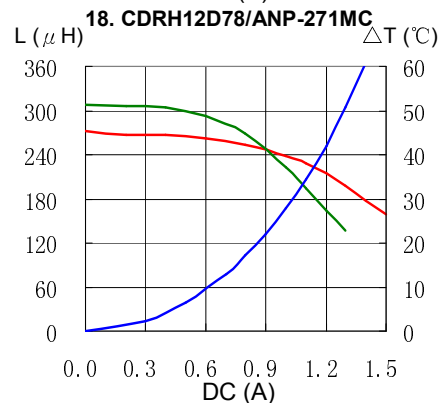
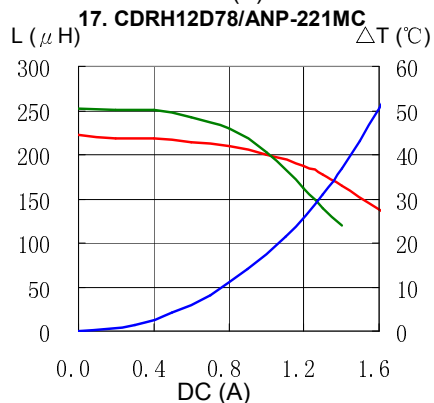
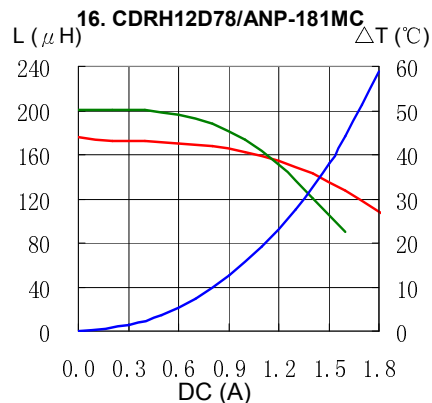
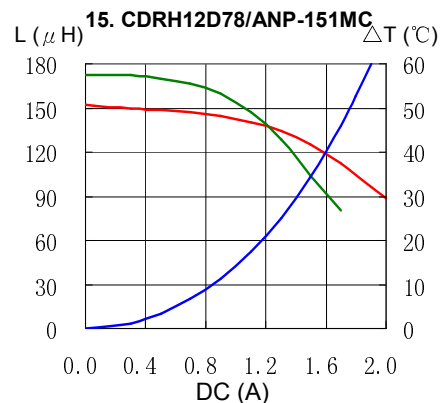
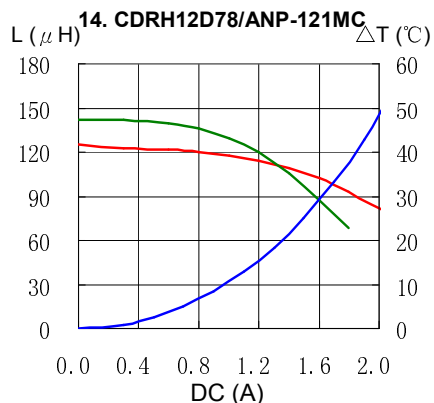
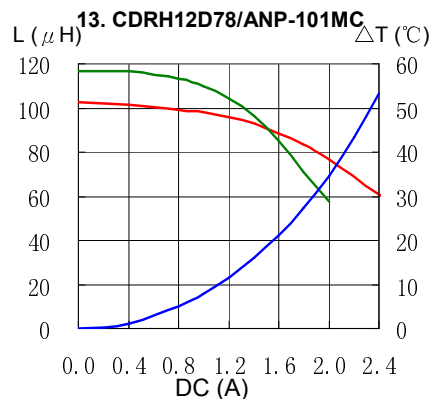


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Saturation Current & Temperature Rise Graph

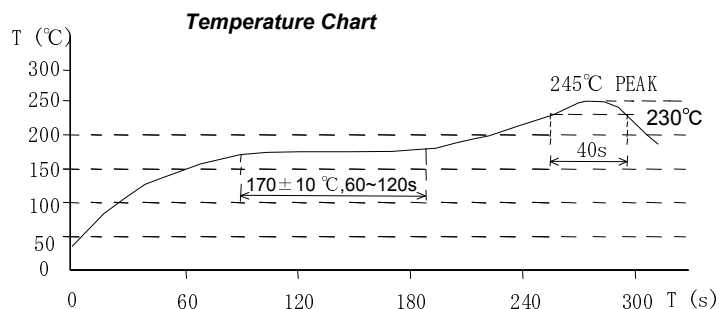
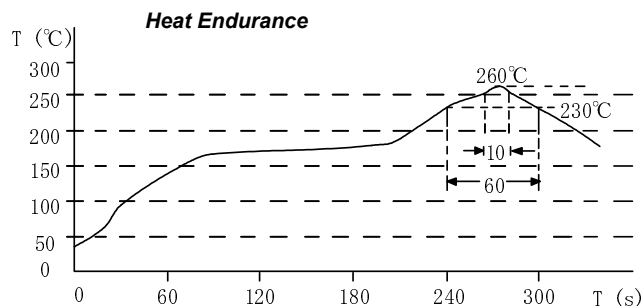
— L (20°C) — L (125°C) — ΔT



SMD Power Inductor CDRH12D78/A



Solder Reflow Condition



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