



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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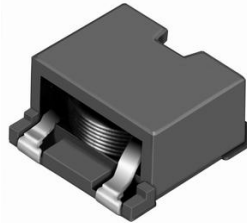
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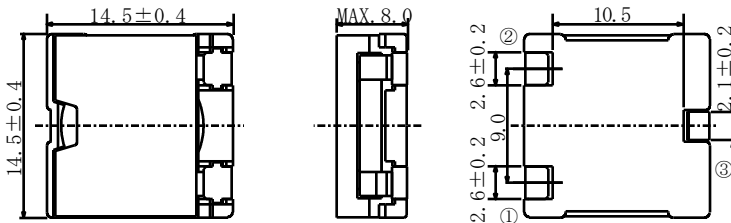
SMD Power Inductor CDEP147



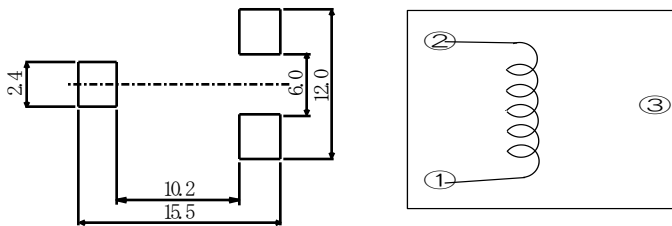
Description

- Ferrite core construction.
- Magnetically shielded.
- L × W × H: 14.9 × 14.9 × 8.0 mm Max.
- Product weight: 5.3g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

Dimension - [mm]



Land pattern and Schematics - [mm]



Environmental Data

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

Packaging

- Carrier tape and reel packaging
- 13.0" diameter reel
- 300pcs per reel

Applications

- Ideally used in personal computer CPU power supply.

Electrical Characteristics

Electrical Characteristics-low D.C.R. type

PART NO.	STAMP	INDUCTANCE [WITHIN] ※1	D.C.R. (mΩ) [MAX.] (Typ.) (at 20°C)	SATURATION CURRENT (A) ※2		TEMPERATURE RISE CURRENT (A) ※3
				(at 20°C)	(at 100°C)	
CDEP147NP-0R5MC-125	0R5ML	0.5μH±20%	1.18(0.98)	39.6(49.5)	33.9(42.4)	23.0
CDEP147NP-1R1MC-125	1R1ML	1.1μH±20%	1.46(1.22)	26.4(33.0)	22.8(28.5)	21.5
CDEP147NP-2R0MC-125	2R0ML	2.0μH±20%	2.02(1.69)	19.6(24.5)	16.8(21.0)	20.0
CDEP147NP-3R1MC-125	3R1ML	3.1μH±20%	3.23(2.70)	16.0(20.0)	13.6(17.0)	17.5
CDEP147NP-4R5MC-125	4R5ML	4.5μH±20%	4.97(4.14)	13.6(17.0)	11.6(14.5)	16.0
CDEP147NP-6R1MC-125	6R1ML	6.1μH±20%	6.03(5.02)	11.6(14.5)	10.0(12.5)	12.5
CDEP147NP-8R0MC-125	8R0ML	8.0μH±20%	7.80(6.50)	10.0(12.5)	8.2(10.3)	11.0
CDEP147NP-100MC-125	100ML	10.0μH±20%	9.85(8.21)	9.2(11.5)	7.6(9.5)	10.0
CDEP147NP-120MC-125	120ML	12.0μH±20%	13.31(11.1)	8.0(10.0)	6.6(8.2)	8.5



Electrical Characteristics—standard type

PART NO.	STAMP	INDUCTANCE [WITHIN] ※1	D.C.R. (mΩ) [MAX.] (Typ.) (at 20°C)	SATURATION CURRENT (A) ※2		TEMPERATURE RISE CURRENT (A) ※3
				(at 20°C)	(at100°C)	
CDEP147NP-0R4NC-95	0R4NS	0.4μH±25%	1.18(0.98)	52.8(66.0)	45.6(57.0)	23.0
CDEP147NP-0R9MC-95	0R9MS	0.9μH±20%	1.46(1.22)	36.0(45.0)	30.8(38.5)	21.5
CDEP147NP-1R5MC-95	1R5MS	1.5μH±20%	2.02(1.69)	27.2(34.0)	22.8(28.5)	20.0
CDEP147NP-2R4MC-95	2R4MS	2.4μH±20%	3.23(2.70)	22.4(28.0)	19.2(24.0)	17.5
CDEP147NP-3R4MC-95	3R4MS	3.4μH±20%	4.97(4.14)	18.4(23.0)	16.0(20.0)	16.0
CDEP147NP-4R7MC-95	4R7MS	4.7μH±20%	6.03(5.02)	15.2(19.0)	14.2(17.8)	12.5
CDEP147NP-6R1MC-95	6R1MS	6.1μH±20%	7.80(6.50)	14.8(18.5)	12.4(15.5)	11.0
CDEP147NP-7R7MC-95	7R7MS	7.7μH±20%	9.85(8.21)	12.4(15.5)	10.6(13.2)	10.0
CDEP147NP-9R5MC-95	9R5MS	9.5μH±20%	13.31(11.1)	11.2(14.0)	9.6(12.0)	8.5

Electrical Characteristics—high power type

PART NO.	STAMP	INDUCTANCE [WITHIN] ※1	D.C.R. (mΩ) [MAX.] (Typ.) (at 20°C)	SATURATION CURRENT (A) ※2		TEMPERATURE RISE CURRENT (A) ※3
				(at 20°C)	(at100°C)	
CDEP147NP-0R3NC-73	0R3NH	0.3μH±25%	1.18(0.98)	70.0(87.6)	59.8(74.8)	23.0
CDEP147NP-0R7MC-73	0R7MH	0.7μH±20%	1.46(1.22)	46.4(58.0)	39.2(49.0)	21.5
CDEP147NP-1R2MC-73	1R2MH	1.2μH±20%	2.02(1.69)	35.7(44.7)	30.0(37.5)	20.0
CDEP147NP-1R8MC-73	1R8MH	1.8μH±20%	3.23(2.70)	29.6(37.0)	24.0(30.0)	17.5
CDEP147NP-2R6MC-73	2R6MH	2.6μH±20%	4.97(4.14)	24.4(30.5)	20.4(25.5)	16.0
CDEP147NP-3R5MC-73	3R5MH	3.5μH±20%	6.03(5.02)	20.8(26.0)	17.2(21.5)	12.5
CDEP147NP-4R7MC-73	4R7MH	4.7μH±20%	7.80(6.50)	17.6(22.0)	16.0(20.0)	11.0
CDEP147NP-5R9MC-73	5R9MH	5.9μH±20%	9.85(8.21)	16.4(20.5)	14.0(17.5)	10.0
CDEP147NP-7R3MC-73	7R3MH	7.3μH±20%	13.31(11.1)	14.6(18.3)	12.2(15.3)	8.5

※1. Measuring condition: at 100kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 75% of it's nominal value.

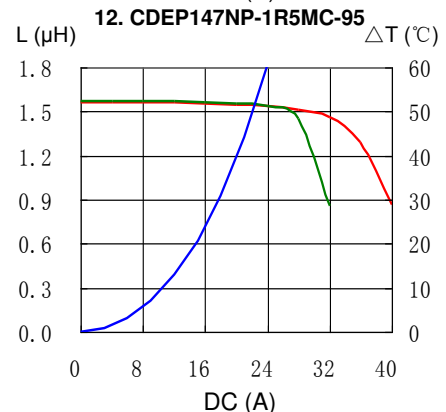
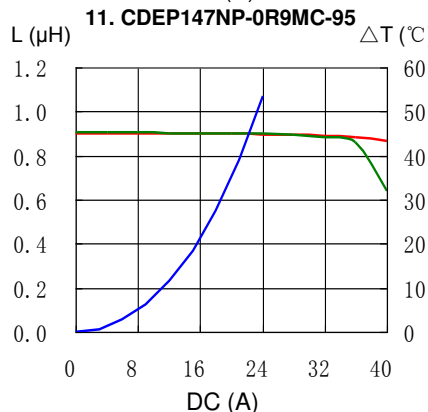
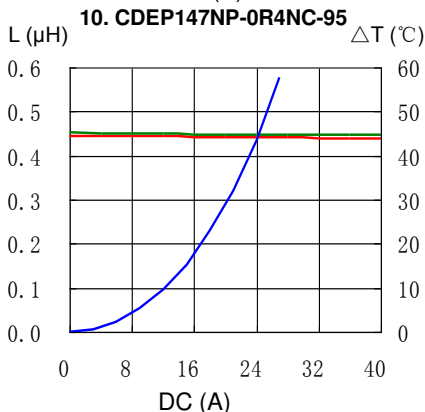
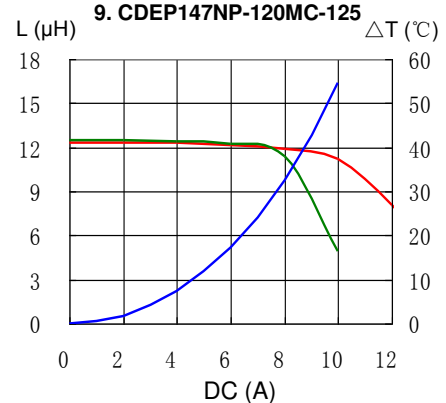
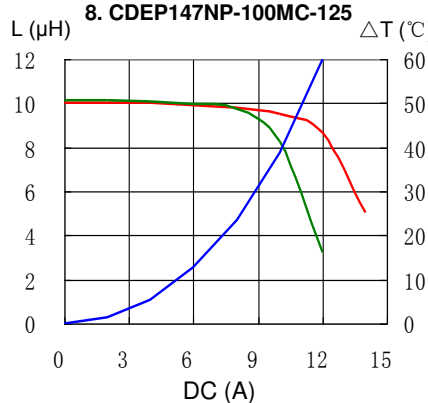
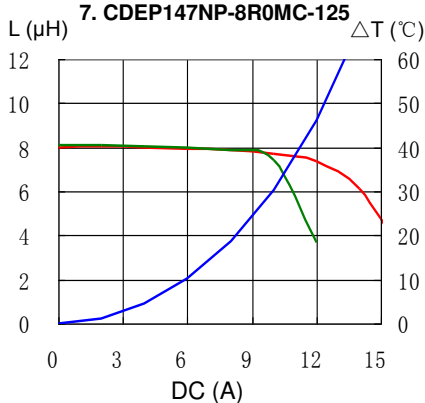
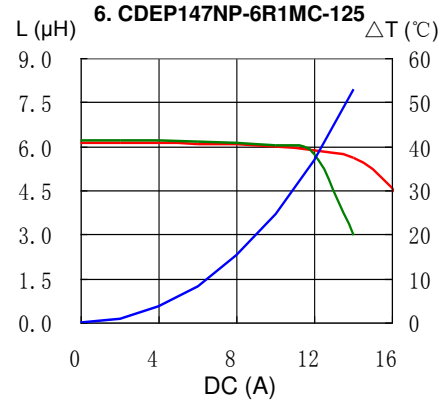
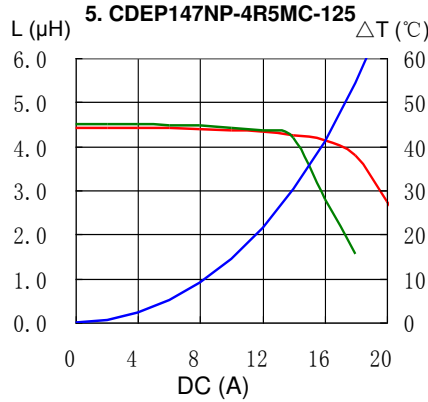
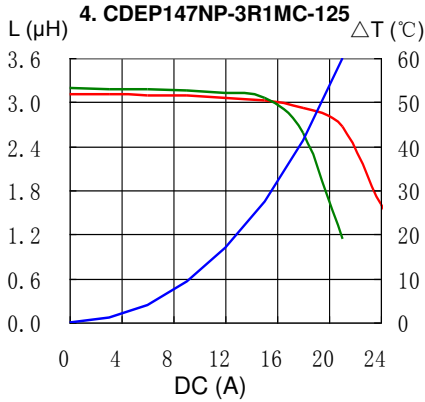
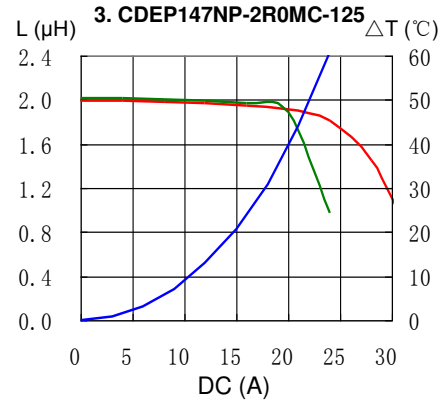
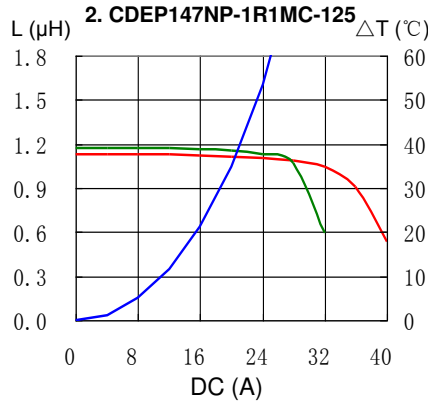
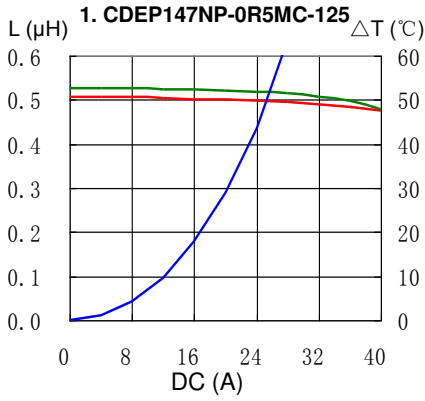
※3. Temperature rise current: The value of D.C. current when the temperature rise is $\Delta t=40^{\circ}\text{C}$ ($T_a=20^{\circ}\text{C}$).

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Saturation Current & Temperature Rise Graph

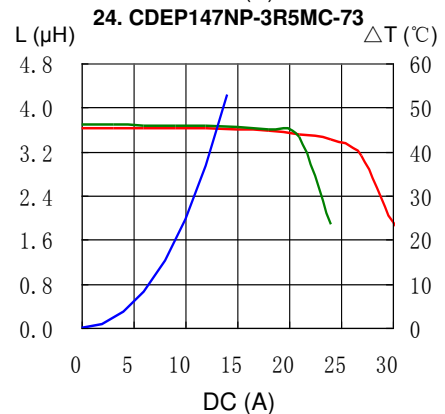
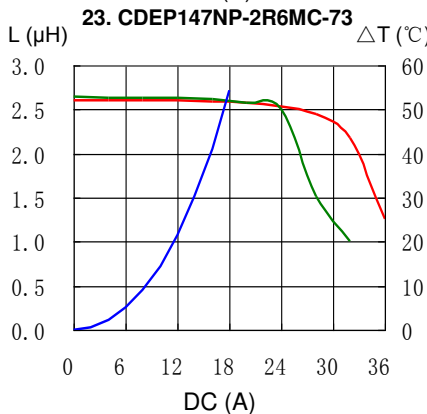
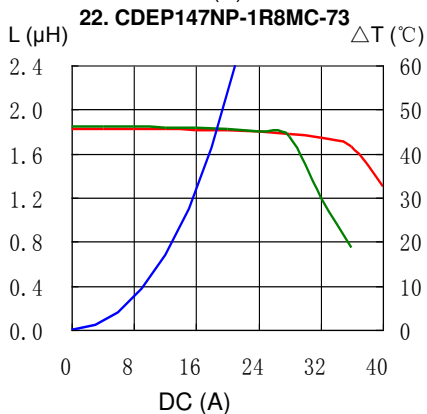
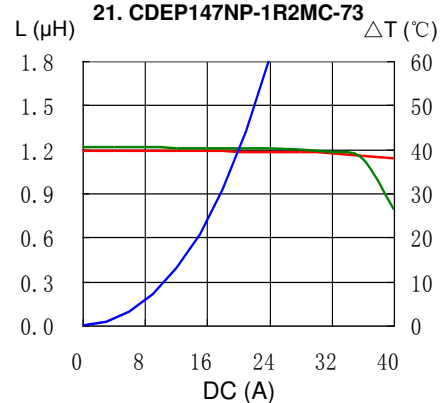
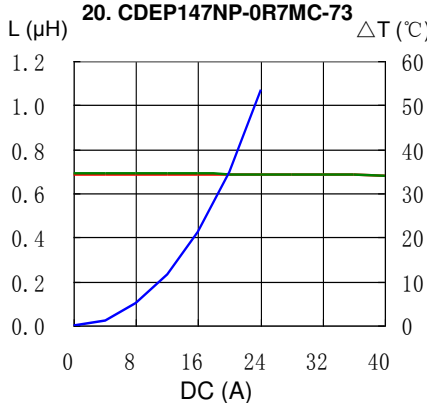
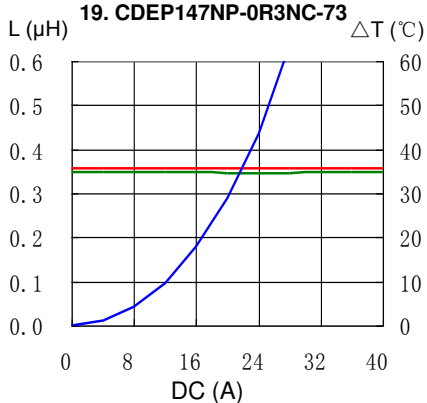
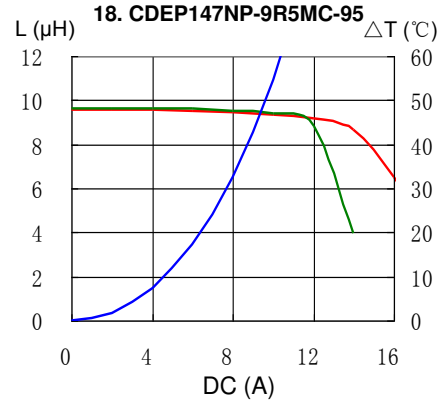
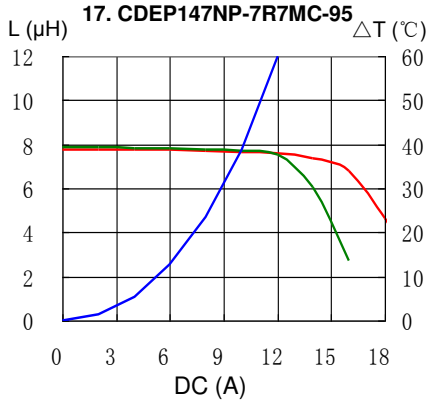
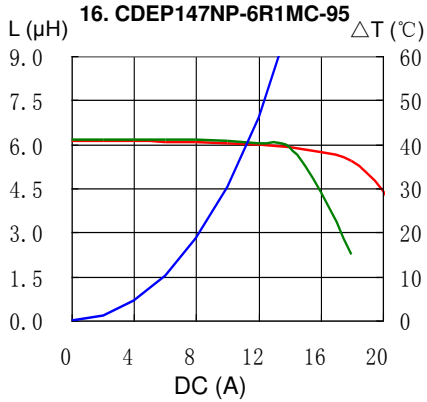
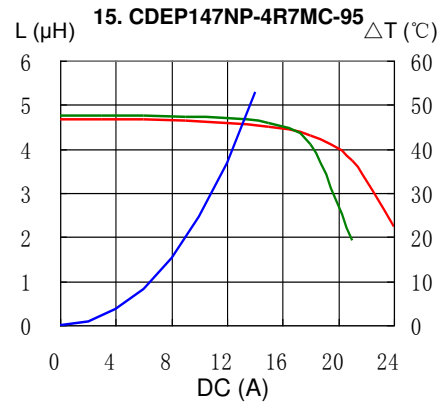
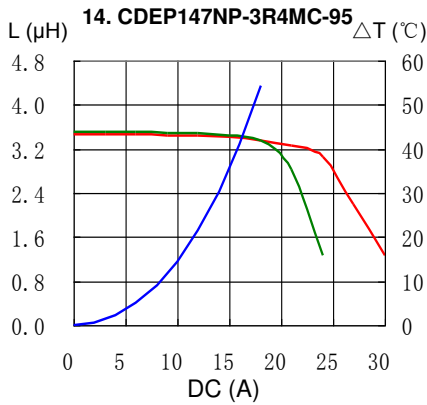
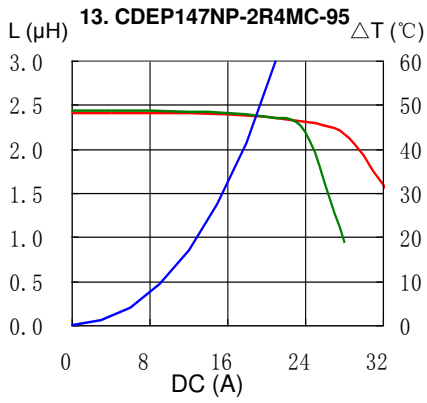
— L (20°C) — L (100°C) — ΔT



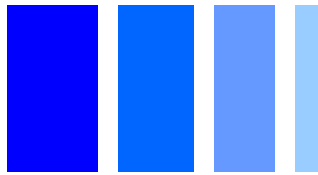


Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) — ΔT

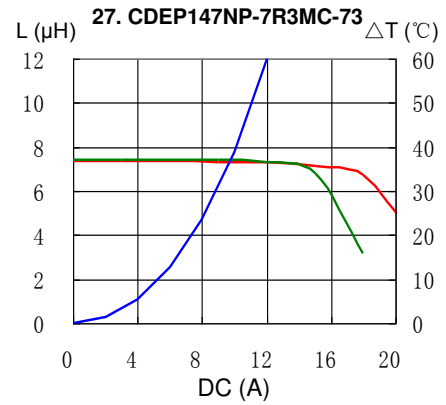
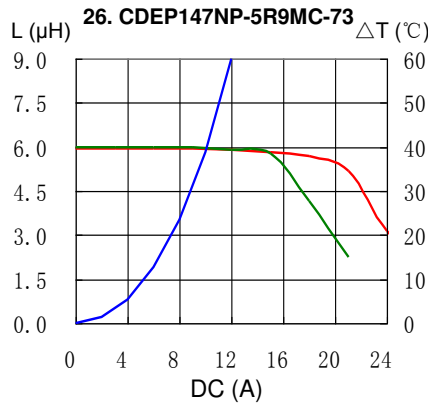
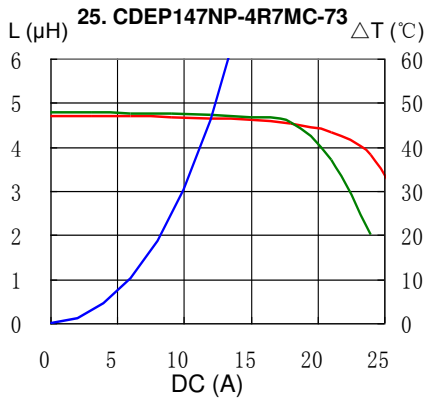


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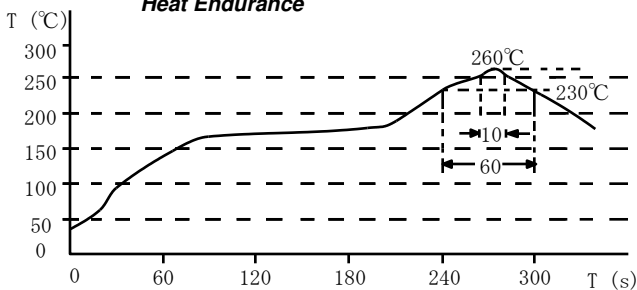
Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) — ΔT

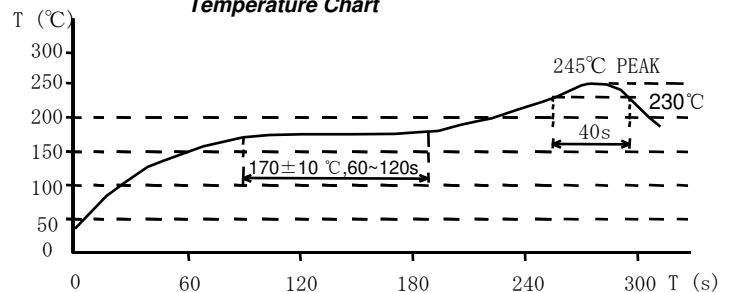


Solder Reflow Condition

Heat Endurance



Temperature Chart



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