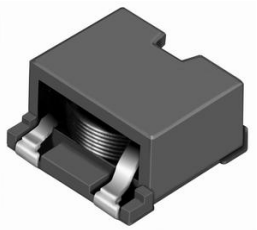
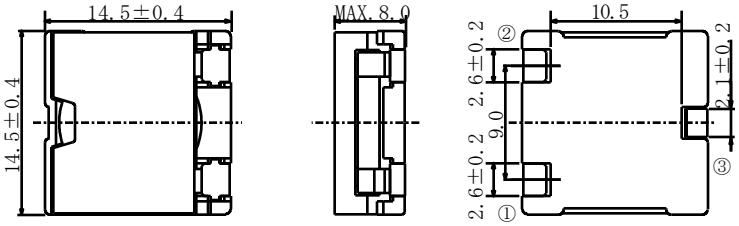
SMD Power Inductor
CDEP147

RoHS



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.

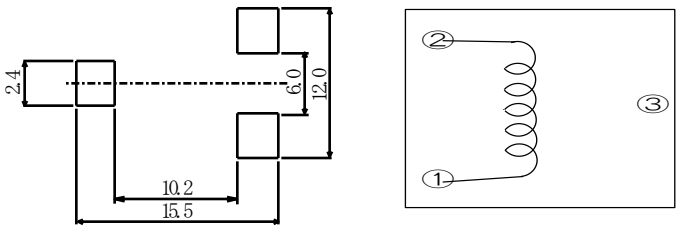
Dimension - [mm]



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

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

Land pattern and Schematics - [mm]



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℃)	SATURATION CURRENT (A) ※2		TEMPERATURE RISE CURRENT (A) ※3
				(at 20℃)	(at100℃)	
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

Revised: 6-Jan-17

Electrical Characteristics–standard type

PART NO.	STAMP	INDUCTANCE ［WITHIN］※1	D.C.R. (mΩ) [MAX.] (Typ.) (at 20℃)	SATURATION CURRENT (A) ※2		TEMPERATURE RISE CURRENT (A) ※3
				(at 20℃)	(at100℃)	
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℃)	SATURATION CURRENT (A) ※2		TEMPERATURE RISE CURRENT (A) ※3
				(at 20℃)	(at100℃)	
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.

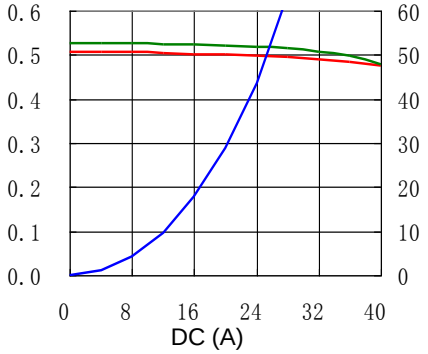
※2. Saturation current: The value of D.C. current when the inductance decreases to 75% of it's nominal value.

※3. Temperature rise current: The value of D.C. current when the temperature rise is △t＝40℃(Ta＝20℃).

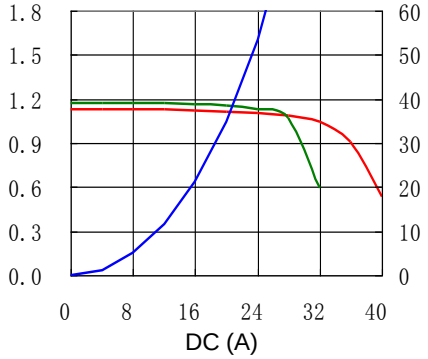
Saturation Current & Temperature Rise Graph

L (20℃) L (100℃) △T

1. CDEP147NP-0R5MC-125



2. CDEP147NP-1R1MC-125



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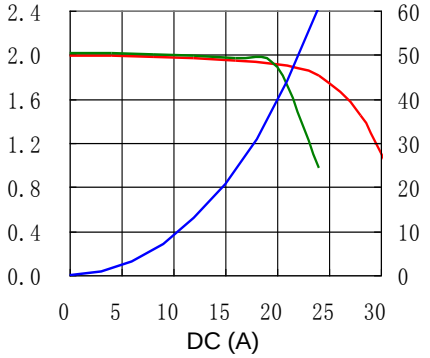

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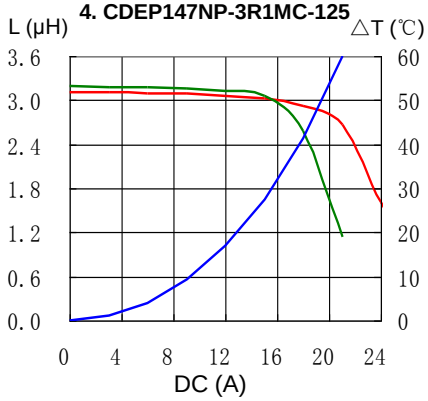
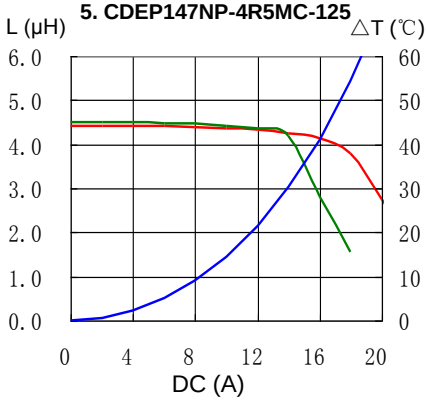
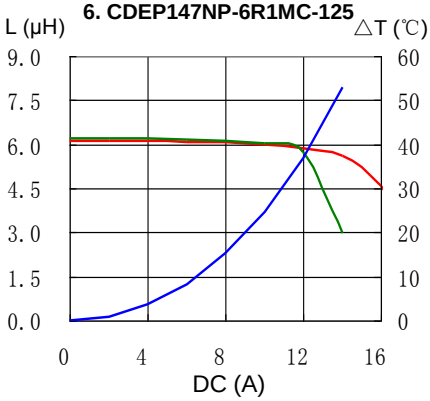


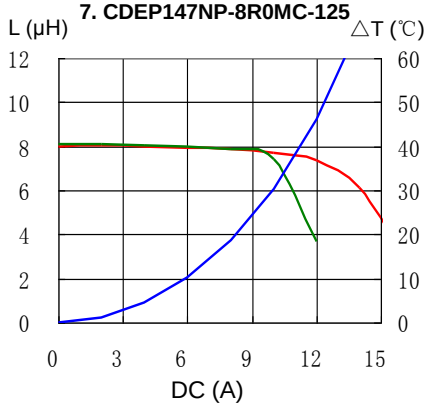
5. CDEP147NP-4R5MC-125



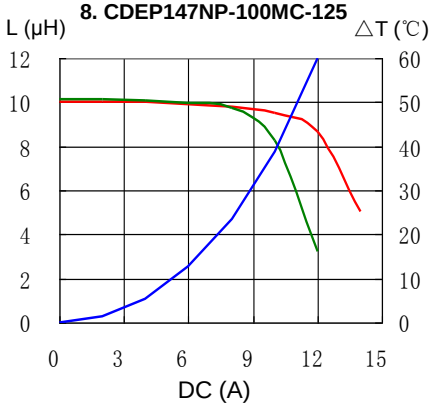
6. CDEP147NP-6R1MC-125



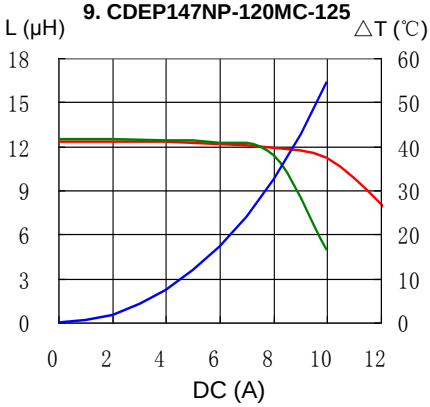
7. CDEP147NP-8R0MC-125



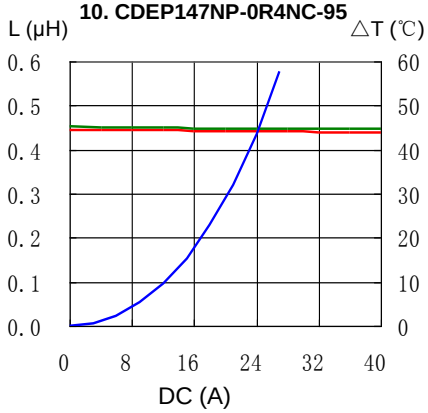
8. CDEP147NP-100MC-125



9. CDEP147NP-120MC-125



10. CDEP147NP-0R4NC-95



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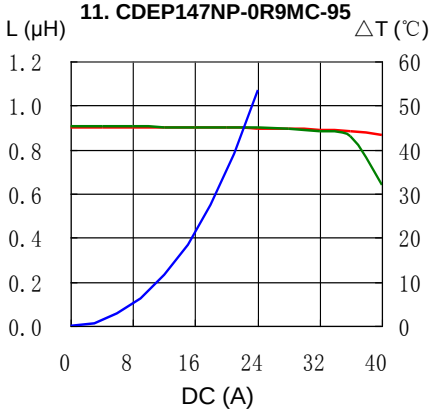

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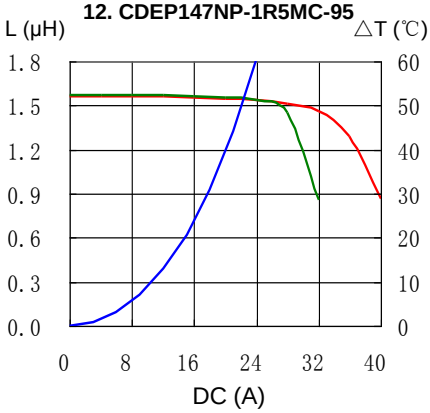
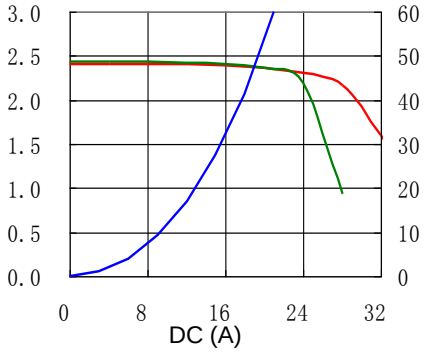


Saturation Current & Temperature Rise Graph

L (20℃) L (100℃) △T

13. CDEP147NP-2R4MC-95



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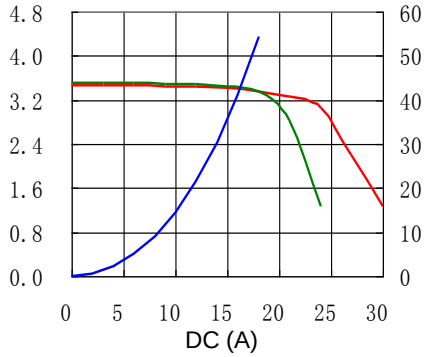

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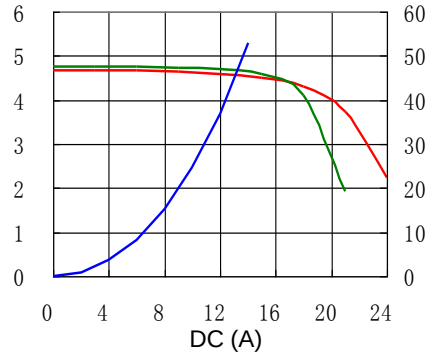

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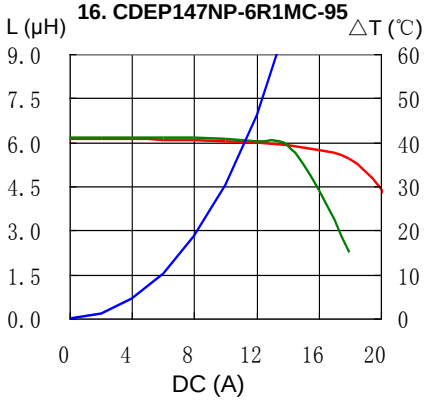
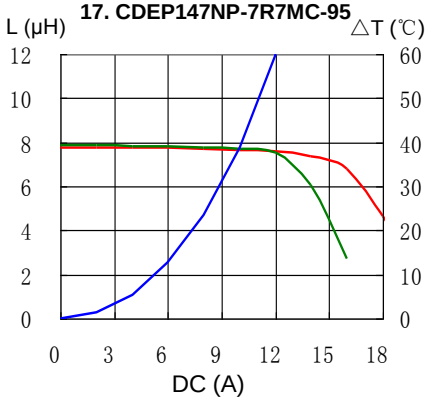
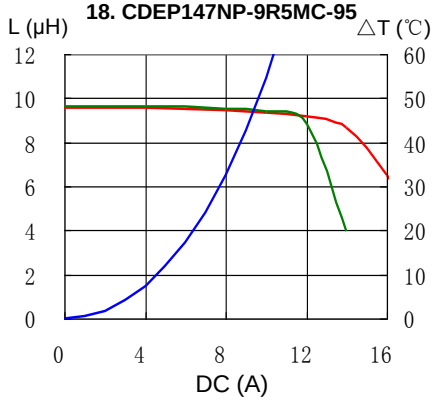


17. CDEP147NP-7R7MC-95



18. CDEP147NP-9R5MC-95



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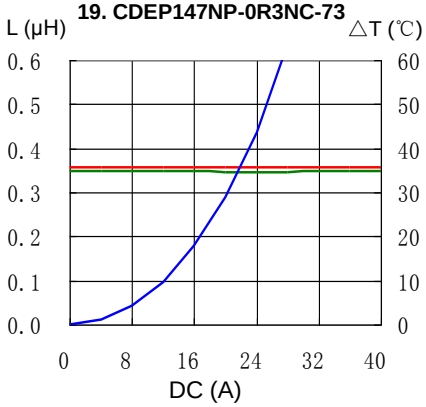

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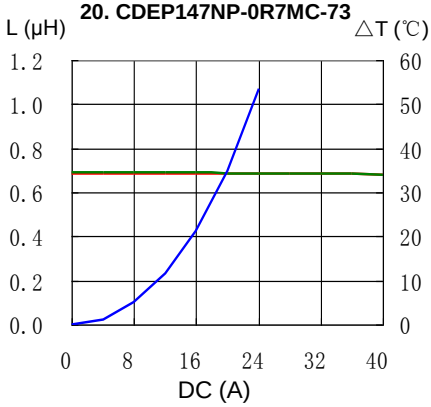

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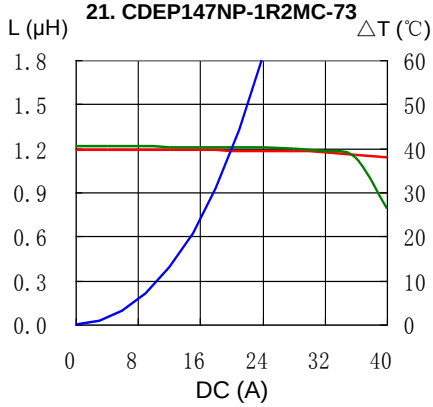

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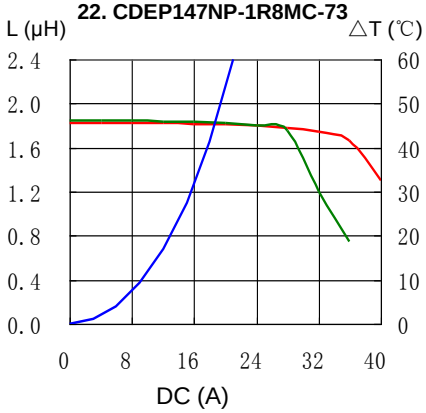

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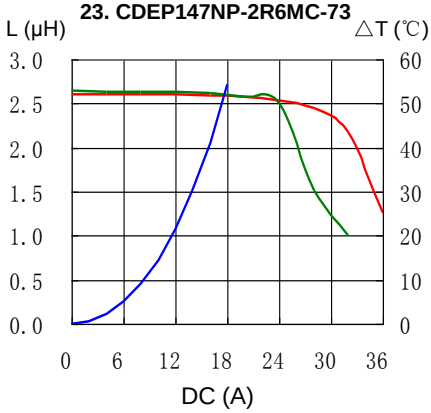

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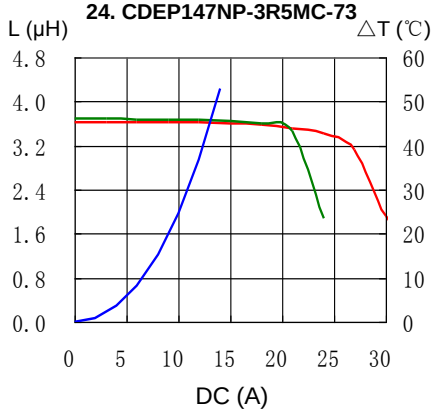
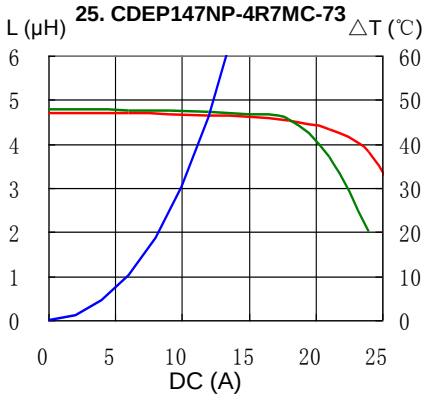
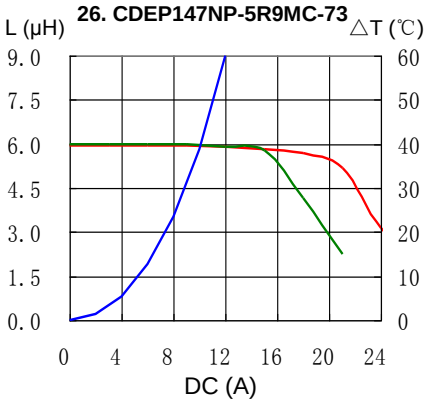
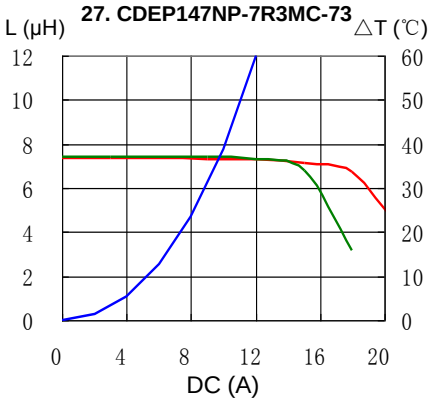


Saturation Current & Temperature Rise Graph

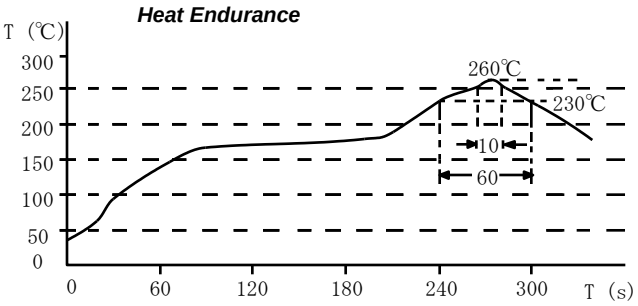
L (20℃) L (100℃) △T

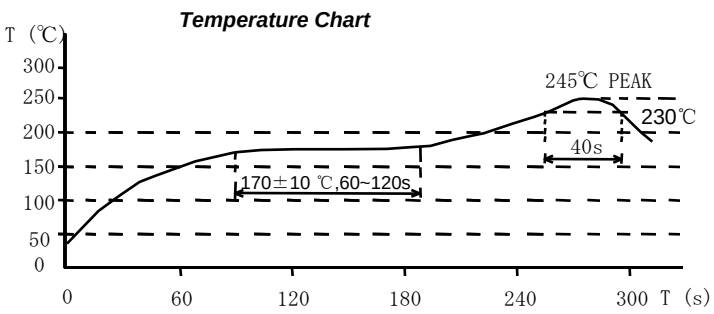






Solder Reflow Condition





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