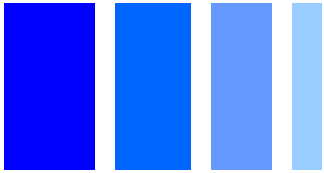


SMD Power Inductor

CDRH127MN



Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 12.3 × 12.3 × 8.0 mm Max.
- Product weight: 3.6g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

Environmental Data

- Operating temperature range: -40°C ~ +105°C (including coil's self temperature rise)
- Storage temperature range: -40°C ~ +105°C
- Solder reflow temperature: 260 °C peak.

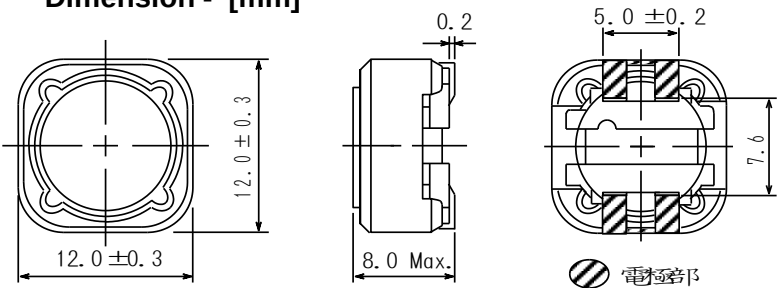
Packaging

- Carrier tape and reel packaging
- 13" diameter reel
- 500pcs per reel

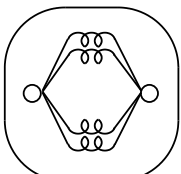
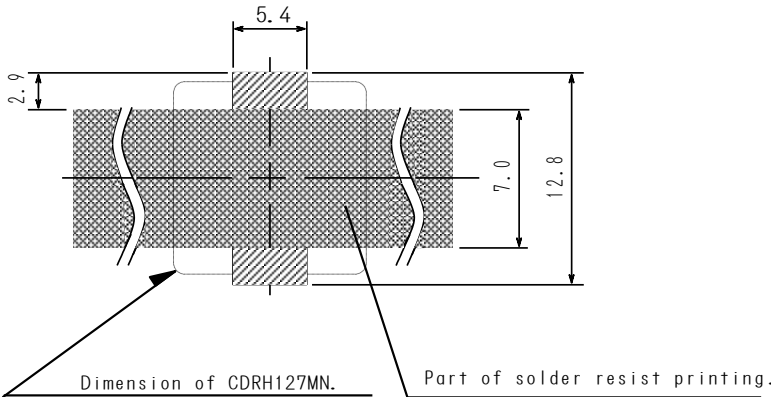
Applications

- Ideally used in Notebook PC, LCD TV,DVD, Game machine, STB ,Projector etc as DC-DC converter inductors.

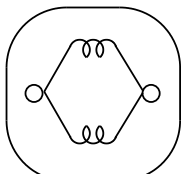
Dimension - [mm]



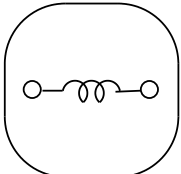
Land pattern and Schematics - [mm]



2.4 μ H ~ 33 μ H



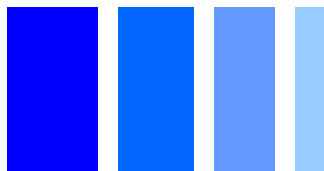
47 μ H ~ 100 μ H



150 μ H ~ 3.9 mH

SMD Power Inductor

CDRH127MN



Electrical Characteristics

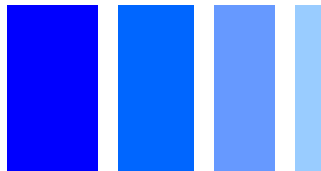
Part name	Stamp	Inductance [Within] ※1	D.C.R. (Ω) (at 20°C) Max.(Typ.)	Saturation current (A) ※2(Typ)		Temperature rise current (A) ※3
				at 20°C Max.(Typ.)	at 105°C Max.(Typ.)	
CDRH127MNNP-2R4NC	2R4	2.4 μ H $\pm$ 30%	8.4m(6.7m)	14.80(19.00)	12.8(16.00)	8.50
CDRH127MNNP-3R3NC	3R3	3.3 μ H $\pm$ 30%	9.9m(7.9m)	12.80(16.50)	10.8(13.60)	8.00
CDRH127MNNP-4R4NC	4R4	4.4 μ H $\pm$ 30%	11.4m(9.1m)	10.80(13.50)	9.40(11.80)	7.50
CDRH127MNNP-5R6NC	5R6	5.6 μ H $\pm$ 30%	12.9m(10.3m)	9.80(12.50)	8.40(10.50)	7.00
CDRH127MNNP-6R8NC	6R8	6.8 μ H $\pm$ 30%	14.5m(11.6m)	8.80(11.00)	7.60(9.50)	6.60
CDRH127MNNP-100MC	100	10 μ H $\pm$ 20%	17.6m(14.1m)	8.00(10.00)	6.40(8.00)	6.30
CDRH127MNNP-150MC	150	15 μ H $\pm$ 20%	28.8m(23.0m)	6.20(7.70)	5.20(6.50)	4.85
CDRH127MNNP-220MC	220	22 μ H $\pm$ 20%	49.5m(39.6m)	5.00(6.30)	4.30(5.40)	3.60
CDRH127MNNP-330MC	330	33 μ H $\pm$ 20%	61.3m(49.0m)	4.20(5.30)	3.40(4.30)	3.10
CDRH127MNNP-470MC	470	47 μ H $\pm$ 20%	86.9m(69.5m)	3.40(4.30)	2.85(3.60)	2.70
CDRH127MNNP-680MC	680	68 μ H $\pm$ 20%	0.129(0.103)	2.70(3.40)	2.20(2.80)	2.20
CDRH127MNNP-101MC	101	100 μ H $\pm$ 20%	0.202(0.162)	2.30(2.90)	1.95(2.45)	1.80
CDRH127MNNP-151MC	151	150 μ H $\pm$ 20%	0.260(0.208)	1.90(2.40)	1.60(2.00)	1.60
CDRH127MNNP-221MC	221	220 μ H $\pm$ 20%	0.331(0.265)	1.60(2.00)	1.40(1.75)	1.50
CDRH127MNNP-271MC	271	270 μ H $\pm$ 20%	0.355(0.284)	1.50(1.85)	1.20(1.50)	1.45
CDRH127MNNP-331MC	331	330 μ H $\pm$ 20%	0.525(0.420)	1.30(1.60)	1.05(1.35)	1.10
CDRH127MNNP-471MC	471	470 μ H $\pm$ 20%	0.730(0.584)	1.10(1.35)	0.92(1.15)	0.95
CDRH127MNNP-681MC	681	680 μ H $\pm$ 20%	1.09(0.87)	0.85(1.10)	0.74(0.92)	0.80
CDRH127MNNP-102MC	102	1.0mH $\pm$ 20%	1.41(1.13)	0.72(0.90)	0.62(0.77)	0.70
CDRH127MNNP-122MC	122	1.2mH $\pm$ 20%	1.85(1.48)	0.68(0.85)	0.56(0.70)	0.57
CDRH127MNNP-152MC	152	1.5mH $\pm$ 20%	2.12(1.70)	0.60(0.75)	0.49(0.61)	0.55
CDRH127MNNP-182MC	182	1.8mH $\pm$ 20%	2.79(2.23)	0.54(0.68)	0.46(0.57)	0.48
CDRH127MNNP-222MC	222	2.2mH $\pm$ 20%	3.13(2.50)	0.48(0.60)	0.40(0.50)	0.45
CDRH127MNNP-272MC	272	2.7mH $\pm$ 20%	4.25(3.40)	0.44(0.55)	0.37(0.46)	0.38
CDRH127MNNP-332MC	332	3.3mH $\pm$ 20%	4.88(3.90)	0.42(0.52)	0.34(0.43)	0.35
CDRH127MNNP-392MC	392	3.9mH $\pm$ 20%	5.28(4.22)	0.38(0.48)	0.30(0.38)	0.32

※1 Measuring condition: 2.4 μ H $\sim$ 680 μ H at 100kHz
1.0mH $\sim$ 3.9mH at 1kHz .

※2 Saturation current: This indicates the actual value of D.C. current when the inductance becomes 25% lower than its initial value.

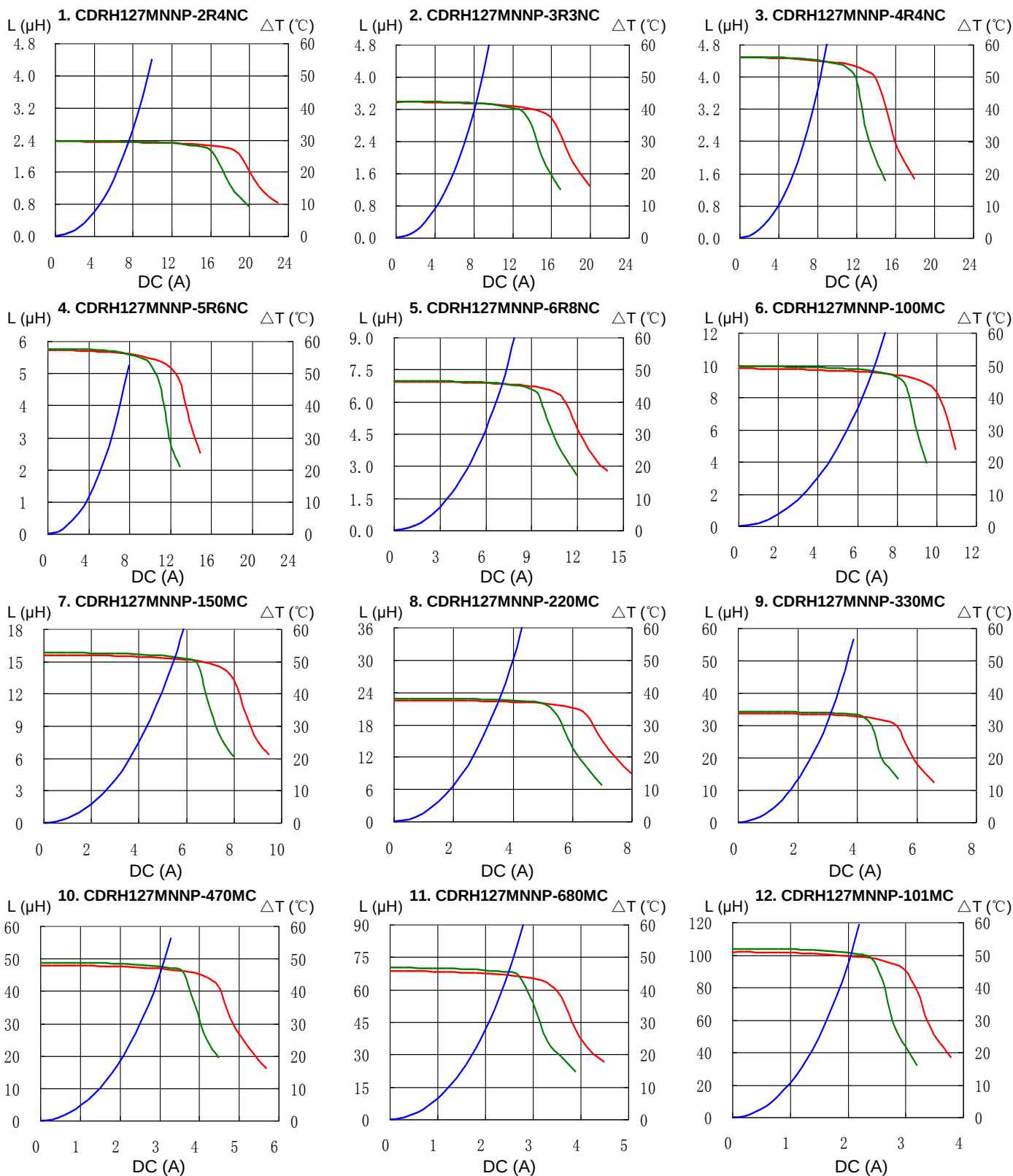
※3 Temperature rise current: The actual value of D.C. current when the temperature of coil becomes $\Delta T=40^{\circ}\text{C}$ ($T_a=20^{\circ}\text{C}$).

SMD Power Inductor CDRH127MN



Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) — ΔT



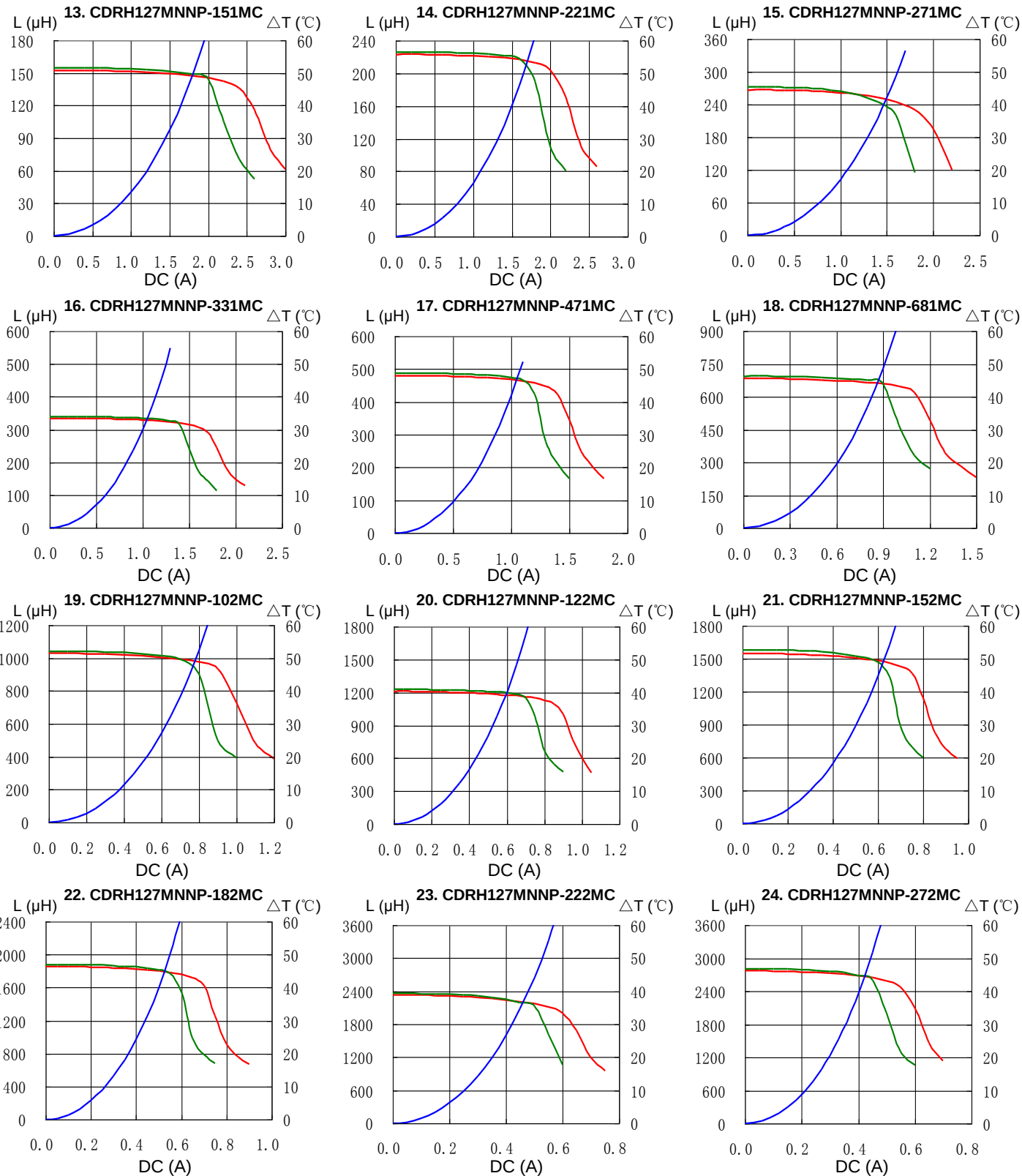
SMD Power Inductor

CDRH127MN



Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) — ΔT

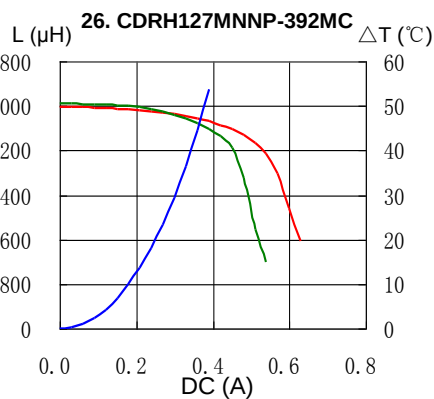
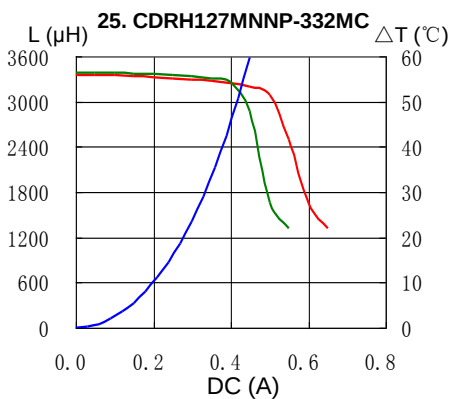


SMD Power Inductor CDRH127MN



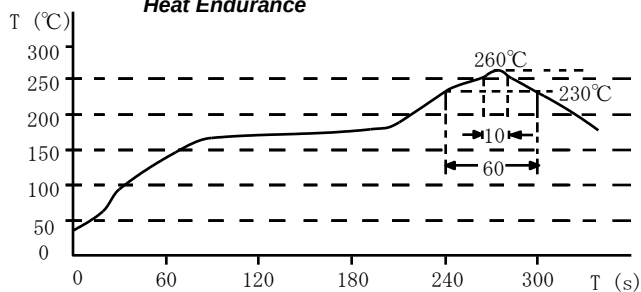
Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) — ΔT

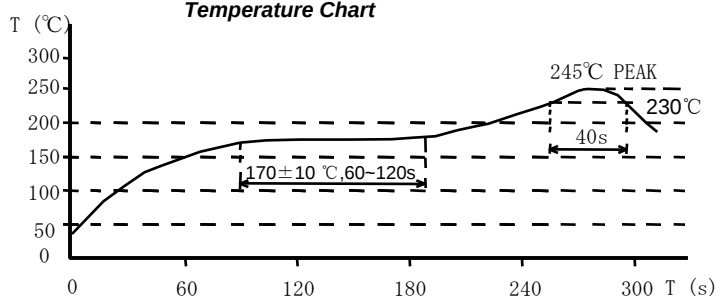


Solder Reflow Condition

Heat Endurance



Temperature Chart



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