

# SMD Power Inductor CDRH125



## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 12.3 × 12.3 × 6.0 mm Max.
- Product weight: 2.9g(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.

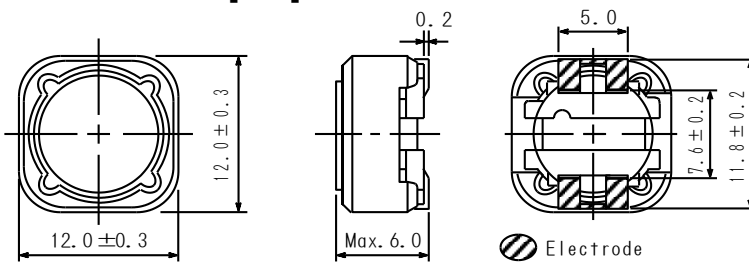
## Packaging

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

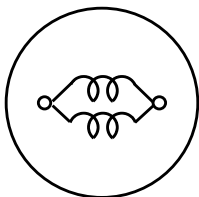
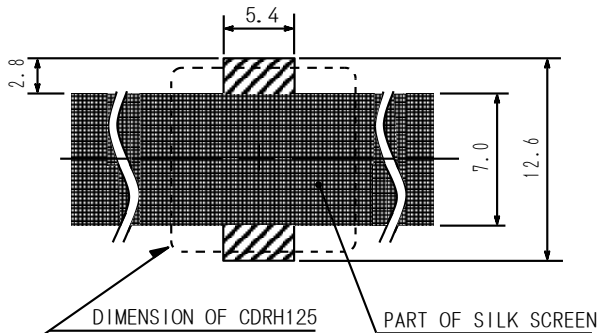
## Applications

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

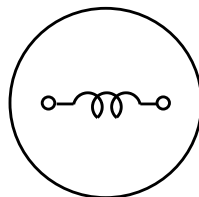
## Dimension - [mm]



## Land pattern and Schematics - [mm]



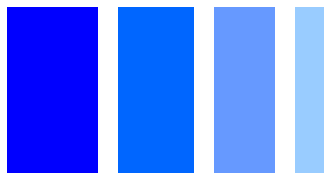
1.3µH ~ 47µH



56µH ~ 1mH

# SMD Power Inductor

## CDRH125



### Electrical Characteristics

Part Name	Stamp	Inductance ( $\mu\text{H}$ ) [ within ] ※1	D.C.R.( $\Omega$ ) Max. (Typ.) (at 20°C)	Rated Current (A) ※2
CDRH125NP-1R3NC	1R3	1.3 $\begin{matrix} +30\% \\ -20\% \end{matrix}$	0.012(0.009)	8.00
CDRH125NP-2R1NC	2R1	2.1 $\begin{matrix} +30\% \\ -20\% \end{matrix}$	0.014(0.011)	7.00
CDRH125NP-3R1NC	3R1	3.1 $\begin{matrix} +30\% \\ -20\% \end{matrix}$	0.017(0.013)	6.00
CDRH125NP-4R4NC	4R4	4.4 $\begin{matrix} +30\% \\ -20\% \end{matrix}$	0.020(0.016)	5.00
CDRH125NP-5R8NC	5R8	5.8 $\begin{matrix} +30\% \\ -20\% \end{matrix}$	0.021(0.017)	4.40
CDRH125NP-7R5NC	7R5	7.5 $\begin{matrix} +30\% \\ -20\% \end{matrix}$	0.024(0.019)	4.20
CDRH125NP-100MC	100	10 $\pm 20\%$	0.025(0.019)	4.00
CDRH125NP-120MC	120	12 $\pm 20\%$	0.027(0.021)	3.50
CDRH125NP-150MC	150	15 $\pm 20\%$	0.030(0.023)	3.30
CDRH125NP-180MC	180	18 $\pm 20\%$	0.034(0.026)	3.00
CDRH125NP-220MC	220	22 $\pm 20\%$	0.036(0.028)	2.80
CDRH125NP-270MC	270	27 $\pm 20\%$	0.051(0.039)	2.30
CDRH125NP-330MC	330	33 $\pm 20\%$	0.057(0.044)	2.10
CDRH125NP-390MC	390	39 $\pm 20\%$	0.068(0.052)	2.00
CDRH125NP-470MC	470	47 $\pm 20\%$	0.075(0.058)	1.80
CDRH125NP-560MC	560	56 $\pm 20\%$	0.11(0.084)	1.70
CDRH125NP-680MC	680	68 $\pm 20\%$	0.12(0.093)	1.50
CDRH125NP-820MC	820	82 $\pm 20\%$	0.14(0.11)	1.40
CDRH125NP-101MC	101	100 $\pm 20\%$	0.16(0.12)	1.30
CDRH125NP-121MC	121	120 $\pm 20\%$	0.17(0.13)	1.10
CDRH125NP-151MC	151	150 $\pm 20\%$	0.23(0.18)	1.00
CDRH125NP-181MC	181	180 $\pm 20\%$	0.29(0.22)	0.90
CDRH125NP-221MC	221	220 $\pm 20\%$	0.40(0.31)	0.80
CDRH125NP-271MC	271	270 $\pm 20\%$	0.46(0.35)	0.75
CDRH125NP-331MC	331	330 $\pm 20\%$	0.51(0.39)	0.68
CDRH125NP-391MC	391	390 $\pm 20\%$	0.69(0.53)	0.65
CDRH125NP-471MC	471	470 $\pm 20\%$	0.77(0.59)	0.58
CDRH125NP-561MC	561	560 $\pm 20\%$	0.86(0.66)	0.54
CDRH125NP-681MC	681	680 $\pm 20\%$	1.20(0.92)	0.48
CDRH125NP-821MC	821	820 $\pm 20\%$	1.34(1.03)	0.43
CDRH125NP-102MC	102	1000 $\pm 20\%$	1.53(1.18)	0.40

※1. Inductance measuring condition: at 1 kHz.

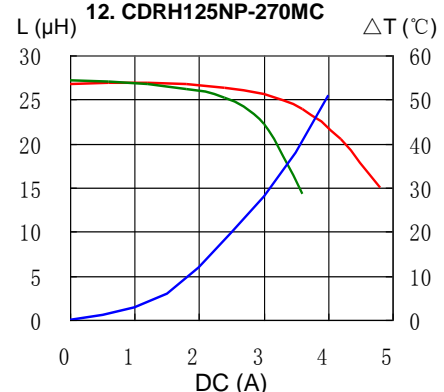
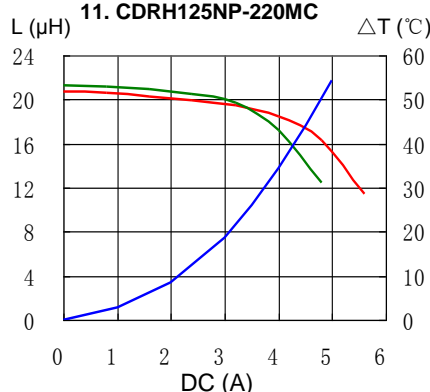
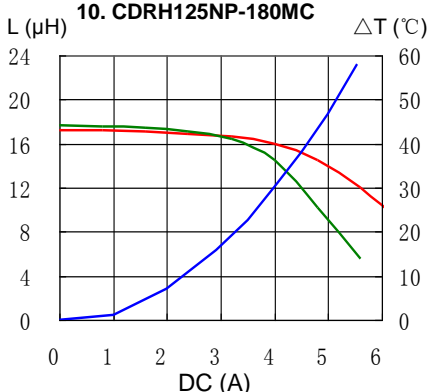
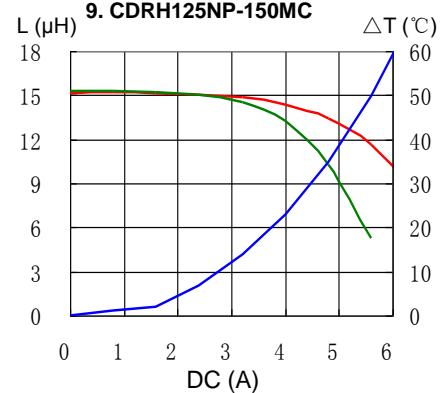
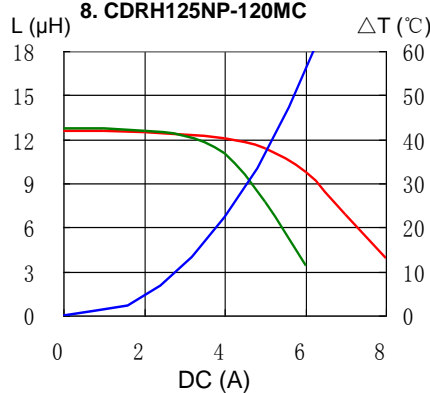
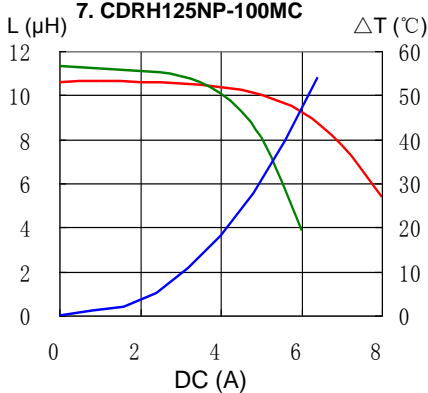
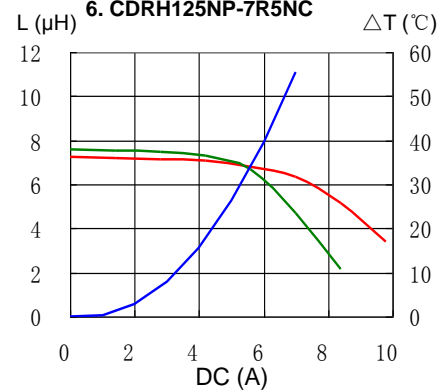
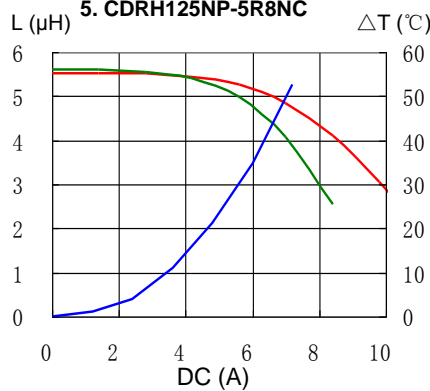
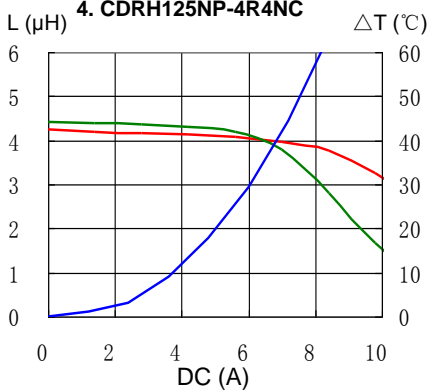
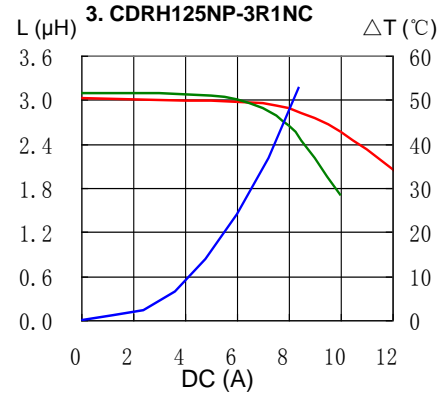
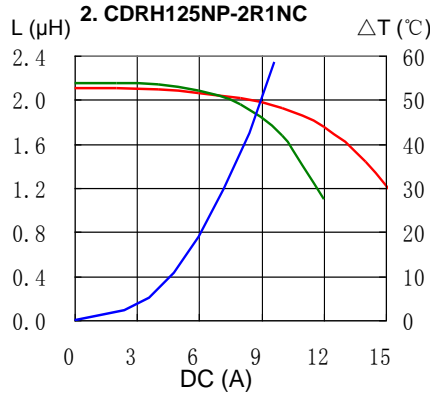
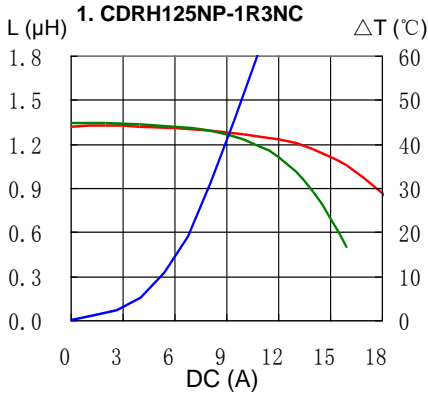
※2. Rated current: The DC current at which the inductance decreases to 75% of its nominal value or when  $\Delta t=40^\circ\text{C}$ , whichever is lower.

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## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

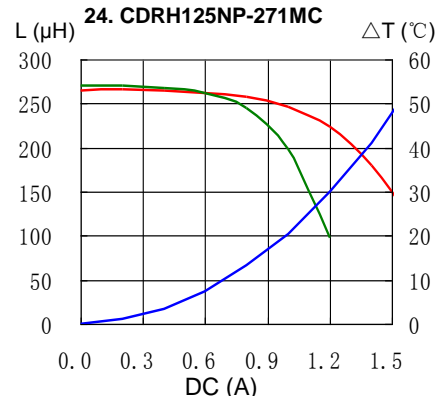
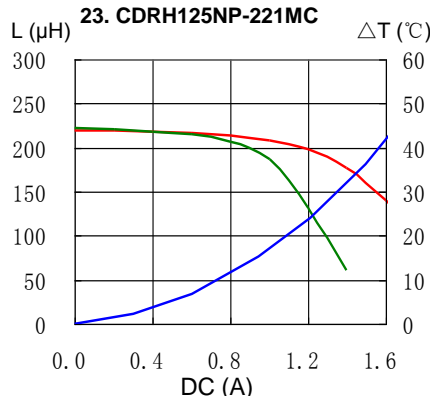
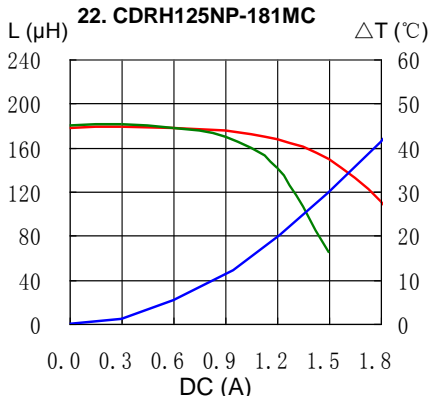
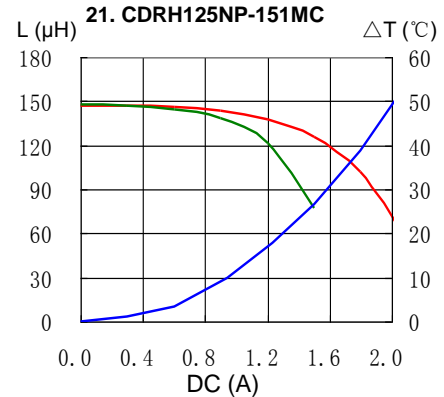
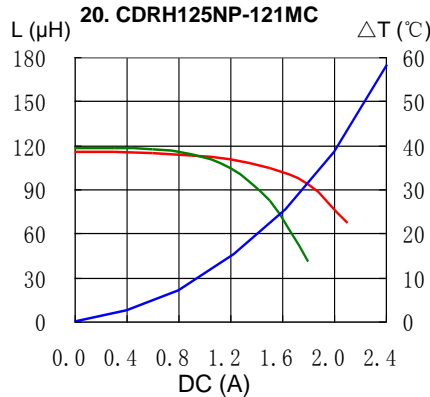
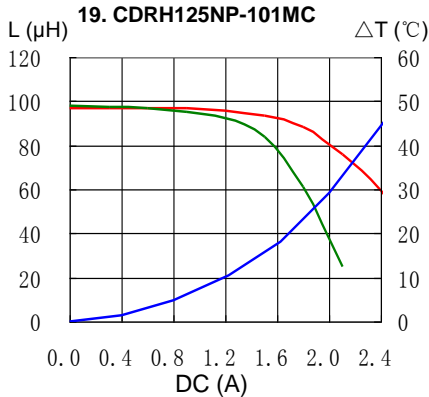
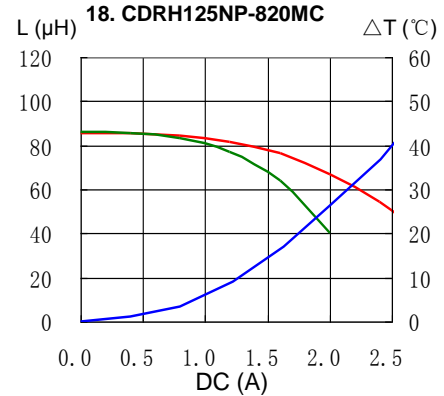
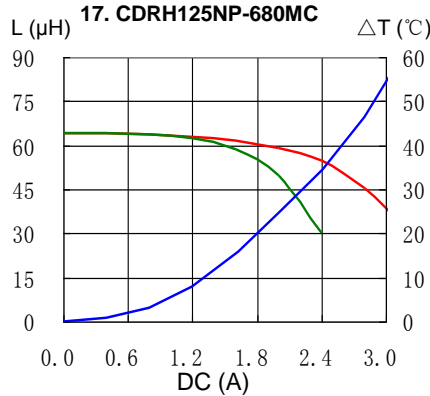
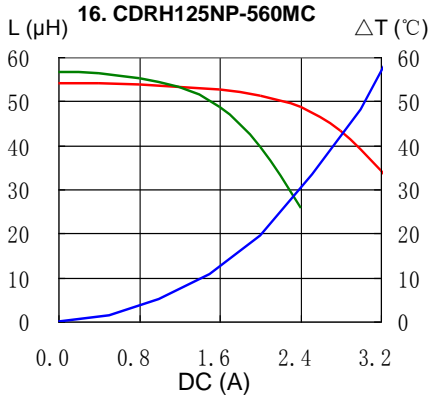
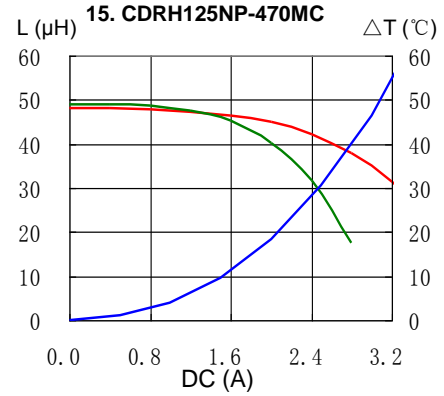
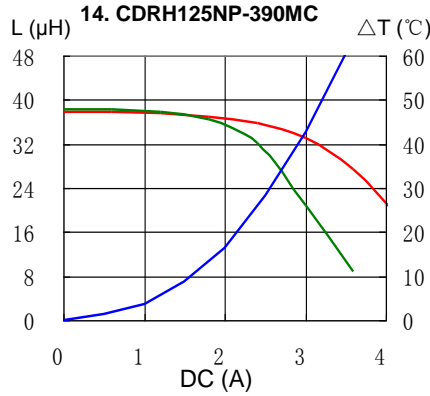
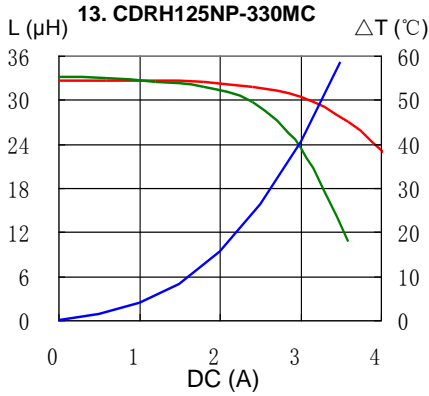


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## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

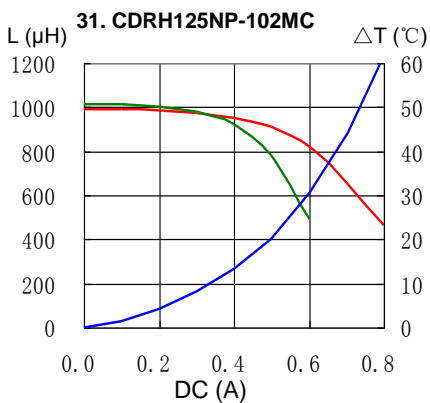
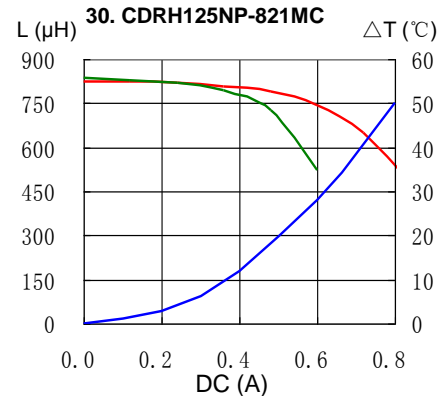
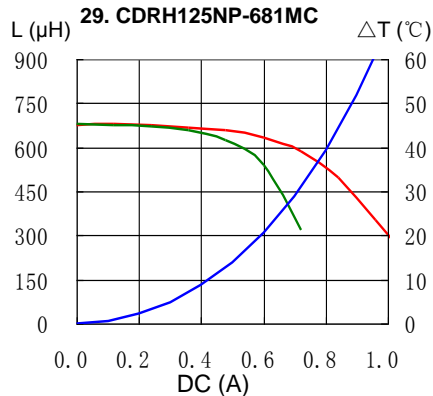
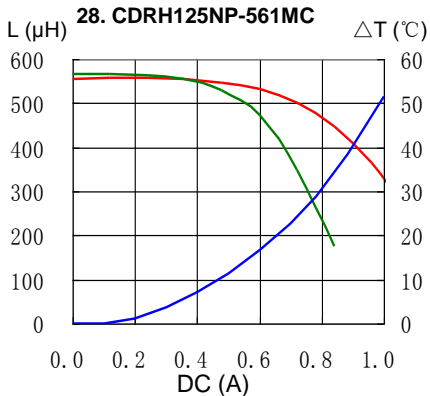
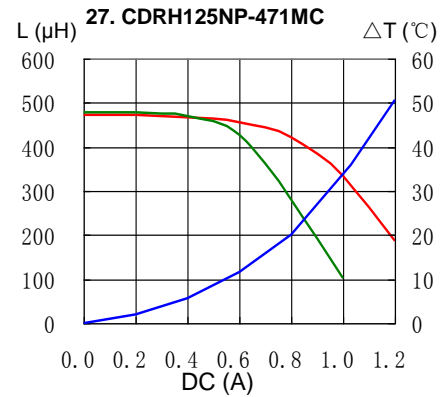
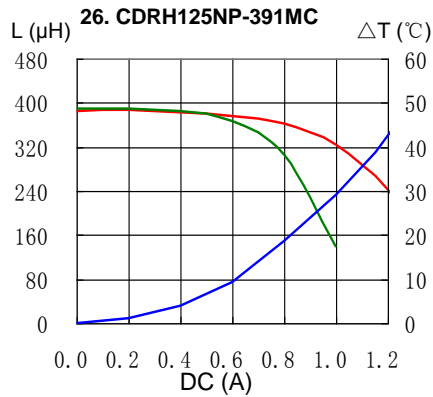
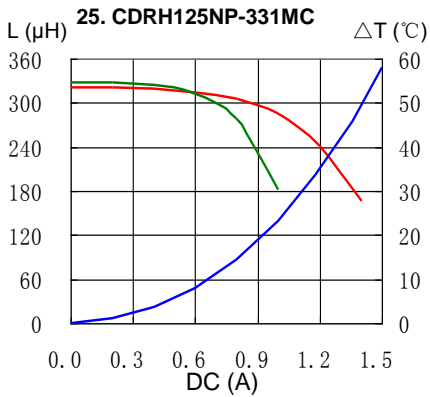


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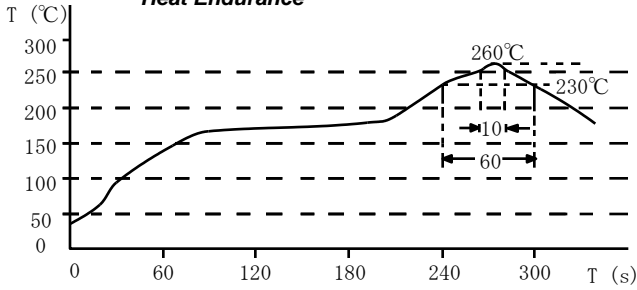


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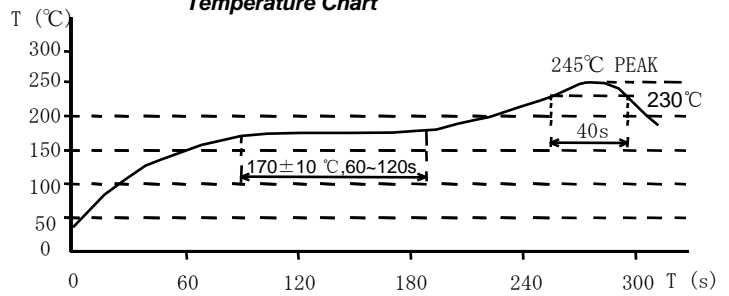


## Solder Reflow Condition

**Heat Endurance**



**Temperature Chart**



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