

# SMD Power Inductor CDRH5D28R/H125



Halogen Free



## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 6.3 × 6.2 × 3.0 mm Max.
- Product weight: 0.35g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.
- Qualification to AEC-Q200.

## 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.

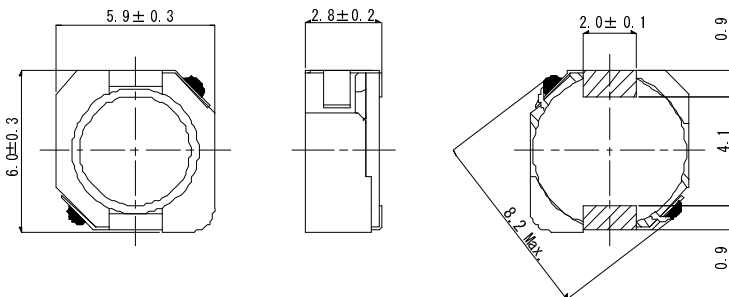
## Packaging

- Carrier tape and reel packaging
- 13.0" diameter reel
- 2000pcs per reel

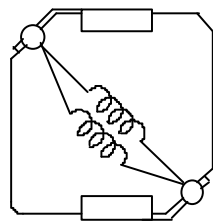
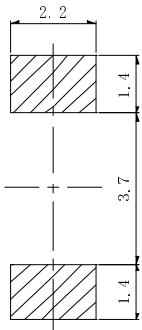
## Applications

- Automotive and other high temperature, high reliability application.

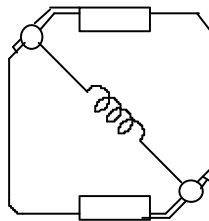
## Dimension - [mm]



## Land pattern and Schematics - [mm]



(1.0 μH ~ 10 μH)



(15 μH ~ 100 μH)

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## Electrical Characteristics

Part No.	Stamp	Inductance [ $\mu$ H] 100kHz	D.C.R. (m $\Omega$ ) [Max.] (at 20°C)	Saturation current (A) ※1		Temperature rise current (A)※2
				(at20°C)	(at125°C) Typ.	
CDRH5D28RH125NP-1R0PC	1R0	1.0 $\pm$ 25%	17.0(13.5)	7.10	5.60	4.10
CDRH5D28RH125NP-1R5PC	1R5	1.5 $\pm$ 25%	20.0(16.0)	6.50	5.10	3.60
CDRH5D28RH125NP-2R4PC	2R4	2.4 $\pm$ 25%	27.0(21.5)	5.30	4.00	3.20
CDRH5D28RH125NP-3R3PC	3R3	3.3 $\pm$ 25%	35.5(28.5)	4.30	3.40	2.72
CDRH5D28RH125NP-4R7PC	4R7	4.7 $\pm$ 25%	54.0(43.0)	3.70	2.89	2.20
CDRH5D28RH125NP-6R8PC	6R8	6.8 $\pm$ 25%	77.5(62.0)	3.08	2.44	1.80
CDRH5D28RH125NP-100MC	100	10 $\pm$ 20%	121(97.0)	2.46	1.93	1.40
CDRH5D28RH125NP-150MC	150	15 $\pm$ 20%	148(118)	2.08	1.63	1.24
CDRH5D28RH125NP-220MC	220	22 $\pm$ 20%	266(213)	1.70	1.33	0.90
CDRH5D28RH125NP-330MC	330	33 $\pm$ 20%	334(267)	1.41	1.12	0.80
CDRH5D28RH125NP-470MC	470	47 $\pm$ 20%	500(400)	1.16	0.91	0.64
CDRH5D28RH125NP-680MC	680	68 $\pm$ 20%	685(548)	0.95	0.74	0.54
CDRH5D28RH125NP-101MC	101	100 $\pm$ 20%	1020(815)	0.80	0.62	0.46

※1. Saturation current: The value of D.C. current when the inductance decreases to 65% of it's nominal value.

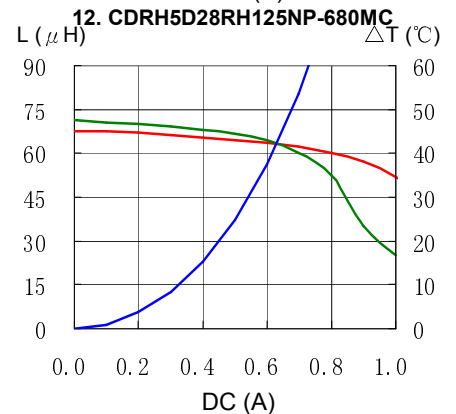
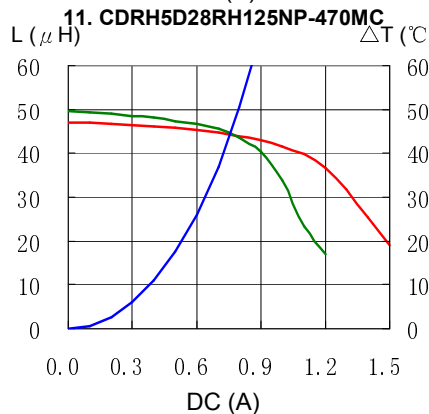
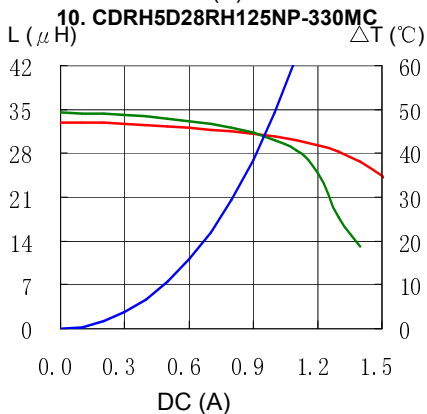
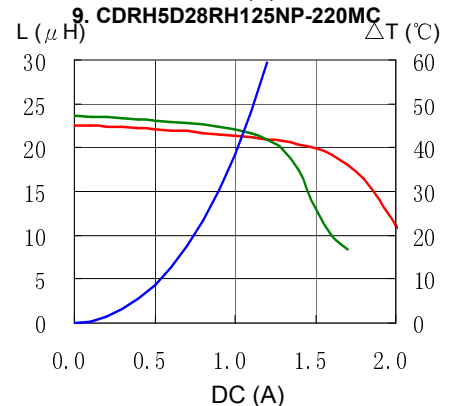
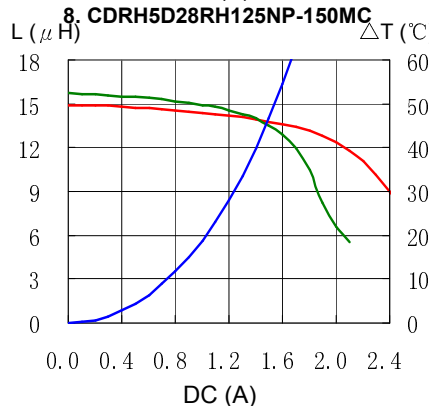
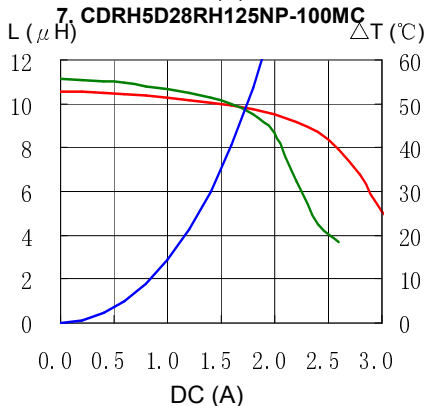
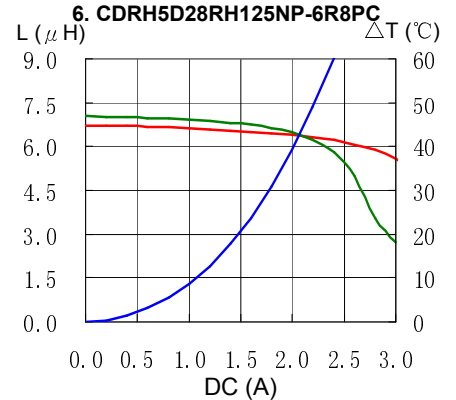
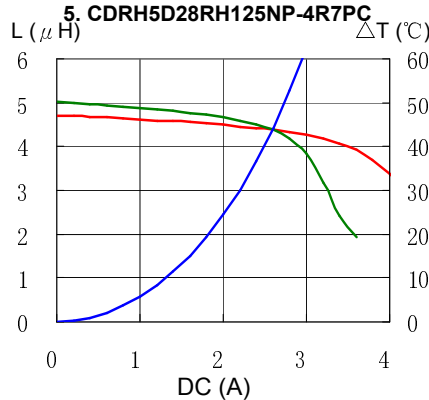
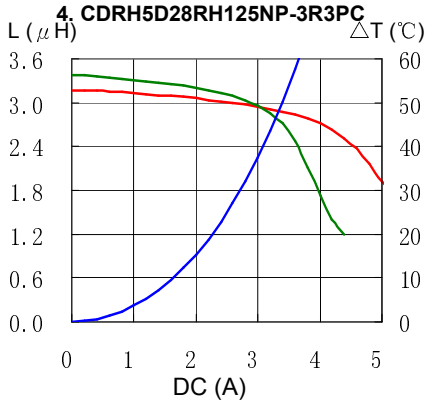
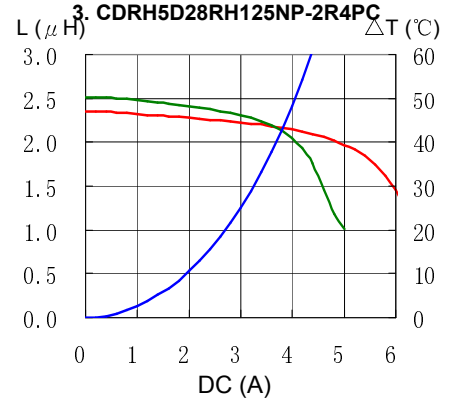
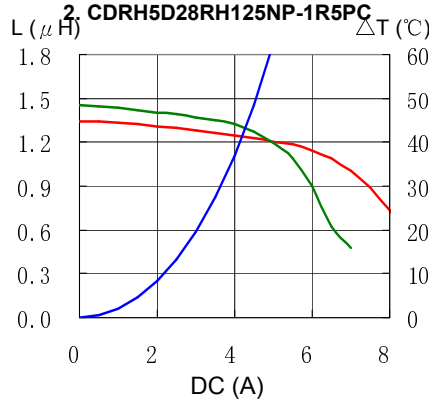
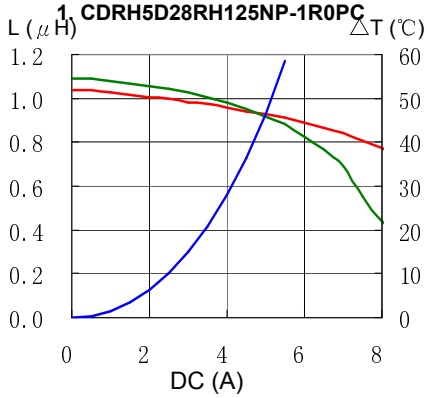
※2. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t=40^{\circ}\text{C}$  ( $T_a=20^{\circ}\text{C}$ ).

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## Saturation Current & Temperature Rise Graph

— L (20°C) — L (125°C) —  $\Delta T$

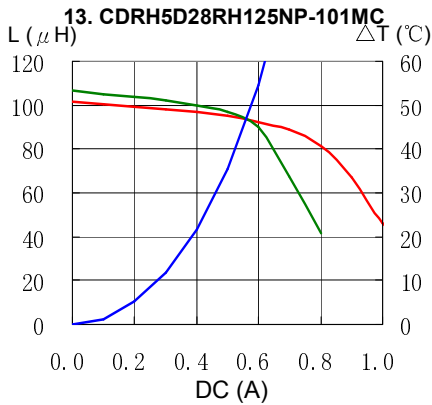


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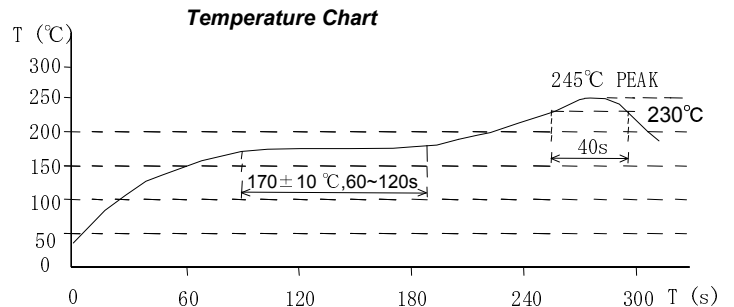
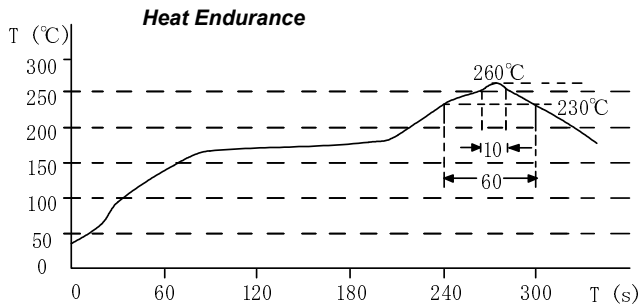


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (125°C) —  $\Delta T$



## Solder Reflow Condition



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