

# SMD Power Inductor CDEIR12D45ME



## Description

- Metal alloy core construction.
- Magnetically shielded.
- L × W × H: 13.7 × 13.0 × 5.0mm Max.
- Product weight :3.0g(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.

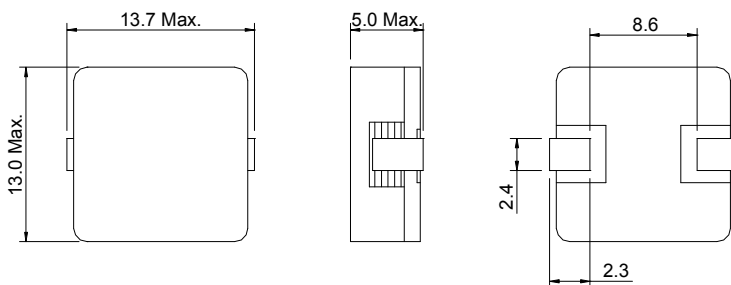
## Packaging

- Carrier tape and reel packaging.
- 13.0" diameter reel
- 500pcs per reel

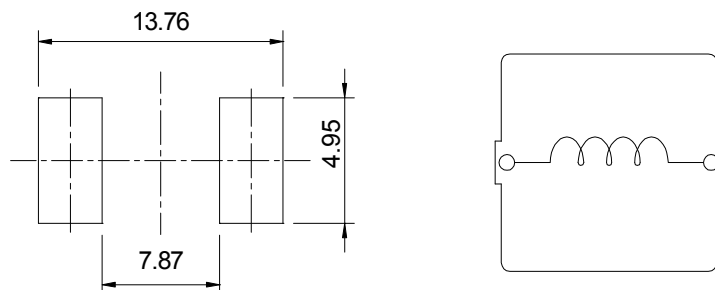
## Applications

- Ideally used in Notebook, PDA and other high current application .

## Dimension - [mm]



## Land pattern and Schematics - [mm]



## Electrical Characteristics

Part No.	Stamp	Inductance (μH) [Within] ※2	D. C. R. (mΩ) [Max. ]	Saturation current (A) ※3	Temperature Rise Current (A) ※4
CDEIR12D45MENP-1R0MC	1R0	1.0 ± 20%	1.9 (1.6)	29.6 (37.0)	18.0 (21.0)
CDEIR12D45MENP-1R5MC	1R5	1.5 ± 20%	3.8 (3.0)	25.2 (31.5)	14.0 (16.0)
CDEIR12D45MENP-2R2MC	2R2	2.2 ± 20%	5.3 (4.2)	21.6 (27.0)	11.6 (13.4)
CDEIR12D45MENP-3R3MC	3R3	3.3 ± 20%	7.6 (6.1)	15.2 (19.0)	9.8 (11.0)
CDEIR12D45MENP-4R3MC	4R3	4.3 ± 20%	8.9 (7.1)	13.1 (16.4)	9.0 (10.5)

※1. Measuring condition Inductance at 100kHz

※2. The saturation current: The value of DC current when the inductance decreases to 80% of its nominal value (Ta=20°C).

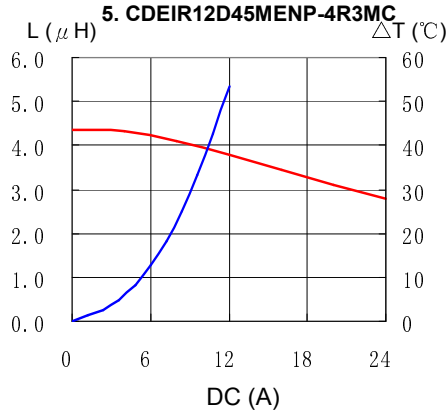
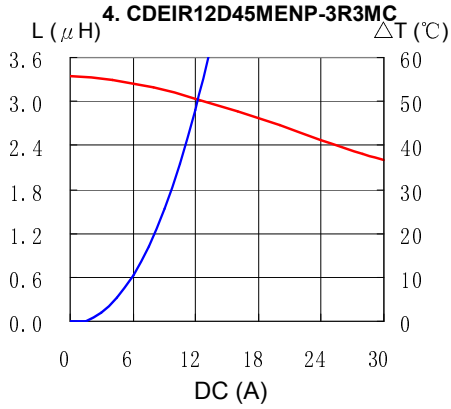
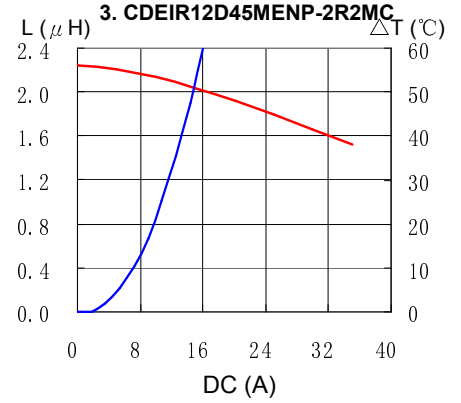
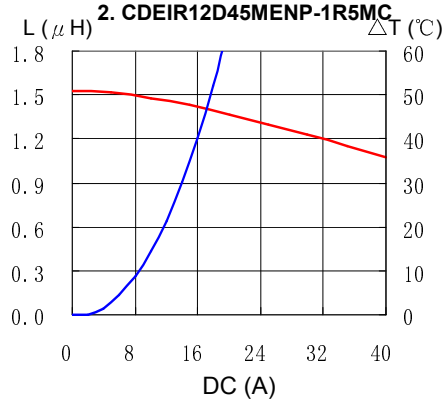
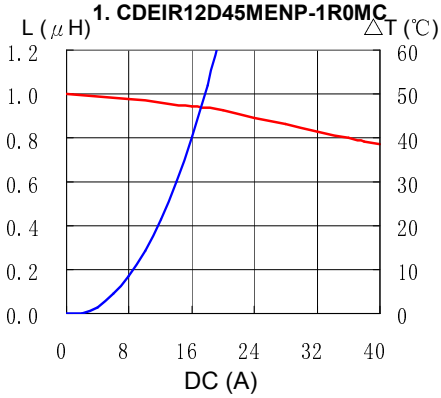
※3. The temperature rise current: The value of DC current when the temperature rise is ΔT=40°C (Ta=20°C).

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## Saturation Current & Temperature Rise Graph

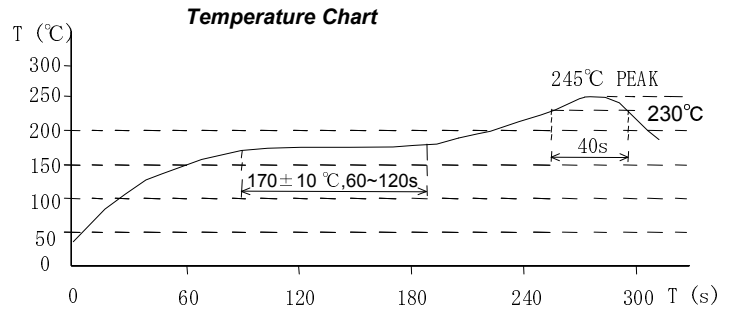
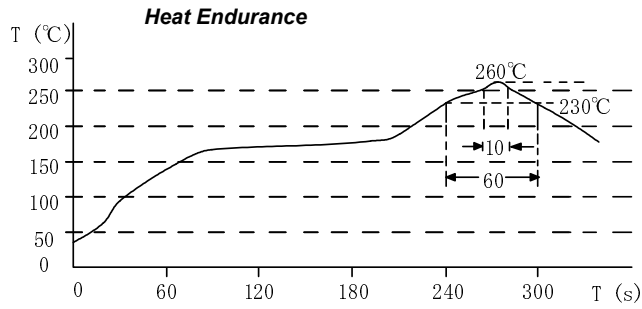
— L (25°C)    —  $\Delta T$



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## Solder Reflow Condition



Please refer to the sales offices on our website - <http://www.sumida.com>

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