

# SMD Power Inductor CDPH45D16F



Halogen Free



## Description

- Ferrite core construction.
- Magnetically shielded.
- L × W × H: 4.9 × 4.7 × 1.8 mm Max.
- Product weight: 0.15g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

## 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.

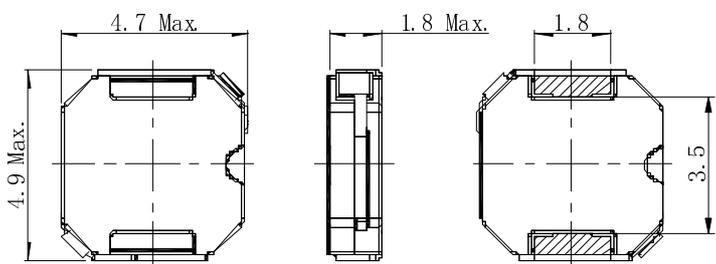
## Packaging

- Carrier tape and reel packaging.
- 7.0" diameter reel
- 1000pcs per reel

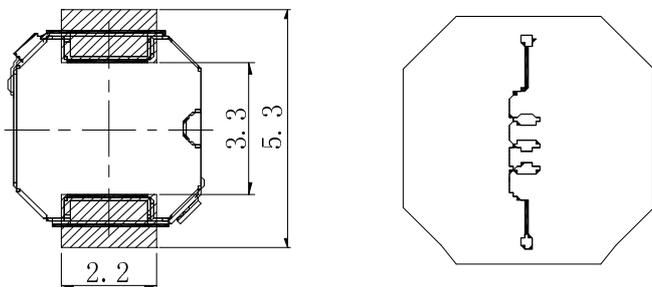
## Applications

- Ideally used in Mobile phone, PDA, HDD etc.

## Dimension - [mm]



## Land pattern and Schematics - [mm]



## Electrical Characteristics

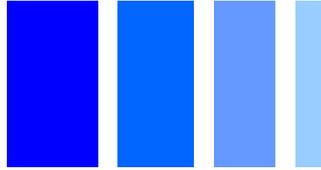
Part No.	Stamp	Inductance ( $\mu$ H) [Within] ※1	D.C.R. (m $\Omega$ ) [Max.] (Typ.)	DC Saturation current (A) ※2	Temperature rise current (A) ※3
CDPH45D16FHF-4R3MC	E	4.3 $\pm$ 20%	85 (68)	2.00 (2.50)	2.00 (2.25)
CDPH45D16FHF-6R8MC	F	6.8 $\pm$ 20%	138 (110)	1.45 (1.80)	1.45 (1.65)
CDPH45D16FHF-8R2MC	G	8.2 $\pm$ 20%	150 (120)	1.35 (1.70)	1.45 (1.65)
CDPH45D16FHF-100MC	J	10.0 $\pm$ 20%	161 (129)	1.30 (1.60)	1.45 (1.65)
CDPH45D16FHF-120MC	K	12.0 $\pm$ 20%	233 (186)	1.20 (1.55)	1.05 (1.20)
CDPH45D16FHF-150MC	L	15.0 $\pm$ 20%	341 (273)	1.10 (1.40)	0.90 (1.05)
CDPH45D16FHF-180MC	M	18.0 $\pm$ 20%	375 (300)	0.90 (1.15)	0.90 (1.00)
CDPH45D16FHF-220MC	N	22.0 $\pm$ 20%	393 (314)	0.90 (1.10)	0.90 (1.00)

※1. Inductor measuring condition: at 100kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 70% of it's nominal value.

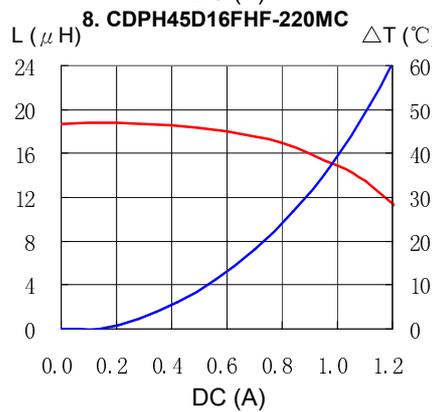
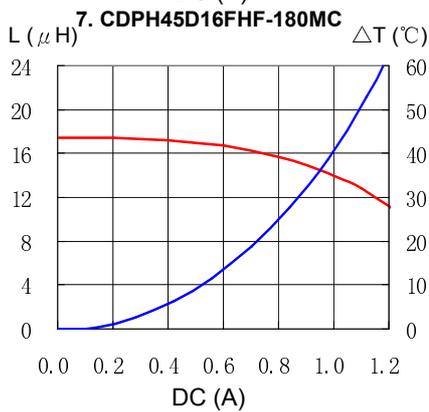
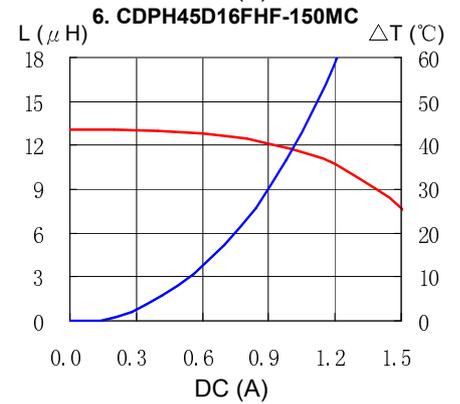
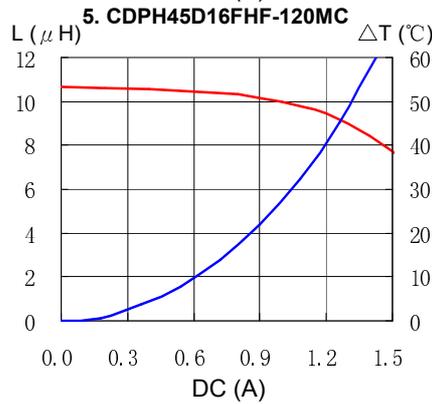
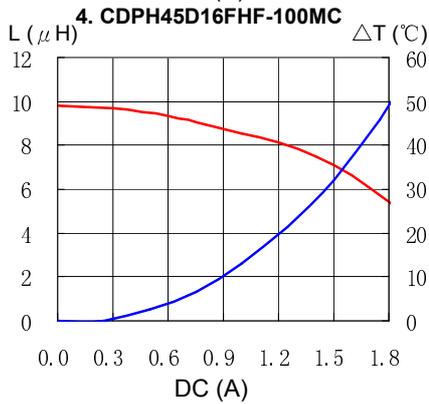
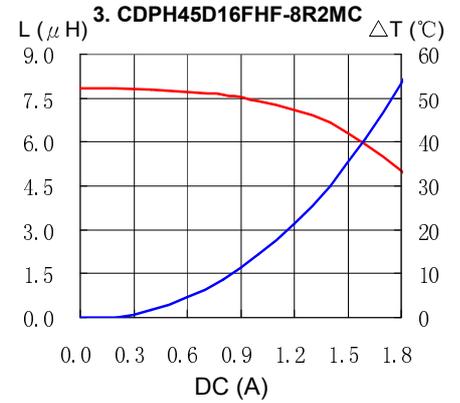
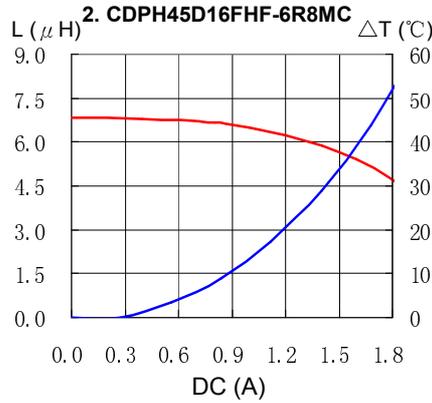
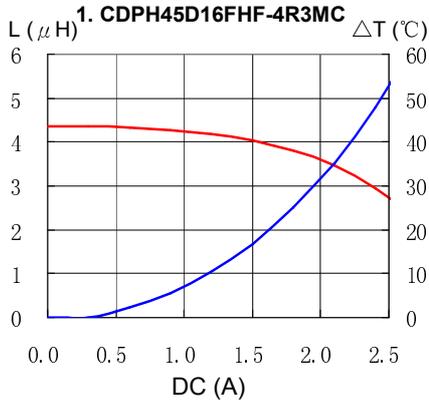
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t=40^{\circ}\text{C}$  ( $T_a=20^{\circ}\text{C}$ ).

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## Saturation Current & Temperature Rise Graph

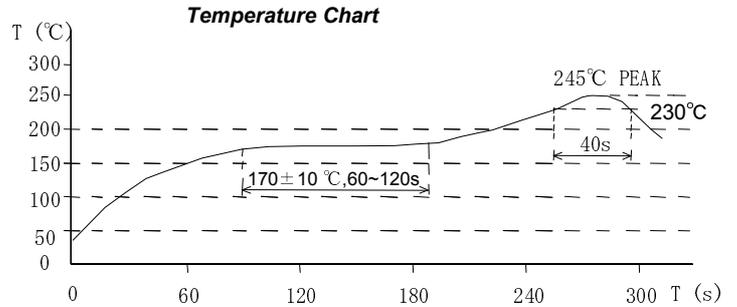
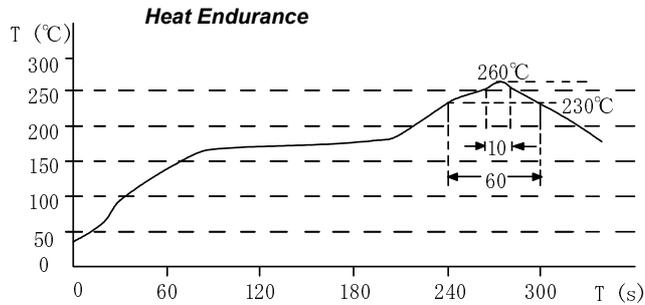
— L (20°C)    —  $\Delta T$



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## Solder Reflow Condition



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

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