

# SMD Power Inductor CDR156



## Description

- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 18.5 × 15.0 × 7.0 mm Max.
- Product weight: 3.1g(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.

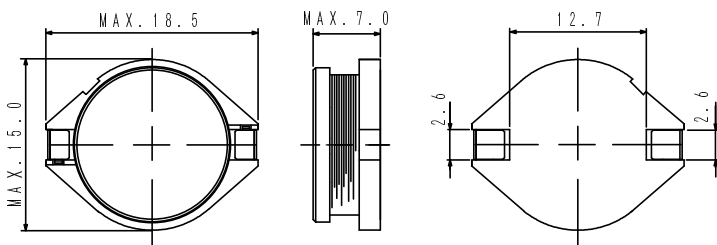
## Packaging

- Carrier tape and reel packaging
- 12.9" diameter reel
- 300pcs per reel

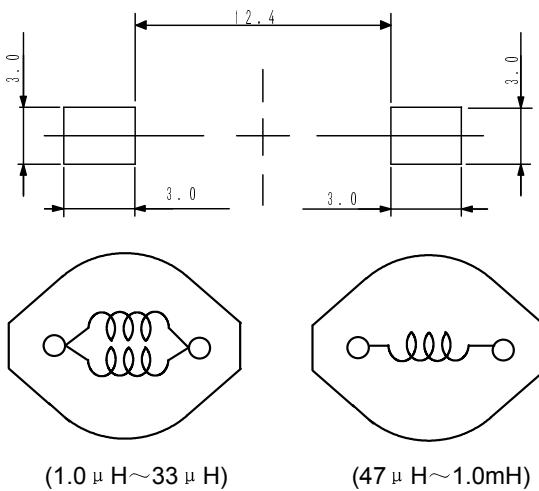
## Applications

- Ideally used in Notebook PC ,LCD TV ,Game machine ,HDD ,DSC/DVC , etc as DC-DC converter inductors.

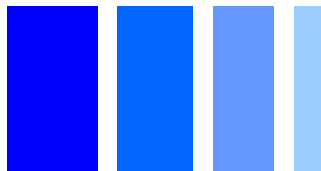
## Dimension - [mm]



## Land pattern and Schematics - [mm]



# SMD Power Inductor CDR156



## Electrical Characteristics

Part Name	Stamp	Inductance ( $\mu$ H) [ within] ※1	D.C.R. (m $\Omega$ ) Max. (Typ.) (at 20°C)	Saturation Current (A) ※2	Temperature Rise Current (A) ※3
CDR156NP-1R0MC	1R0M	1.0 $\pm$ 20%	5.3(4.2)	28.0	10.0
CDR156NP-2R5MC	2R5M	2.5 $\pm$ 20%	8.1(6.5)	18.4	9.0
CDR156NP-3R3MC	3R3M	3.3 $\pm$ 20%	9.8(7.8)	16.4	7.5
CDR156NP-5R6MC	5R6M	5.6 $\pm$ 20%	13.5(10.8)	12.8	7.0
CDR156NP-6R8MC	6R8M	6.8 $\pm$ 20%	17.5(14.0)	11.2	6.0
CDR156NP-100LC	100L	10 $\pm$ 15%	25.0(20.0)	9.6	5.5
CDR156NP-150LC	150L	15 $\pm$ 15%	34.5(27.6)	7.6	4.3
CDR156NP-220LC	220L	22 $\pm$ 15%	43.5(34.8)	6.4	4.0
CDR156NP-330LC	330L	33 $\pm$ 15%	68.0(54.4)	5.2	3.0
CDR156NP-470LC	470L	47 $\pm$ 15%	97.8(78.2)	4.2	2.5
CDR156NP-680LC	680L	68 $\pm$ 15%	144.6(115.7)	3.6	2.0
CDR156NP-101LC	101L	100 $\pm$ 15%	220.0(176.0)	2.9	1.6
CDR156NP-151LC	151L	150 $\pm$ 15%	315.2(252.2)	2.5	1.3
CDR156NP-221LC	221L	220 $\pm$ 15%	466.3(373.0)	2.0	1.1
CDR156NP-331LC	331L	330 $\pm$ 15%	646.0(516.8)	1.6	0.9
CDR156NP-471LC	471L	470 $\pm$ 15%	933.3(746.6)	1.4	0.75
CDR156NP-681LC	681L	680 $\pm$ 15%	1670(1340)	1.1	0.55
CDR156NP-102LC	102L	1000 $\pm$ 15%	2100(1750)	0.9	0.48

※1. Inductance measuring condition: at 100kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 90% of it's nominal value.

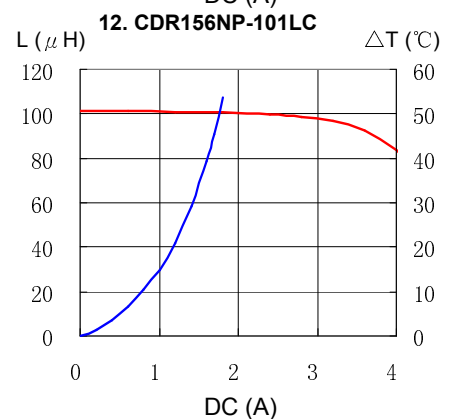
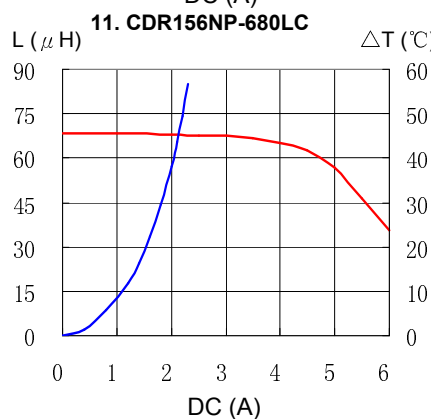
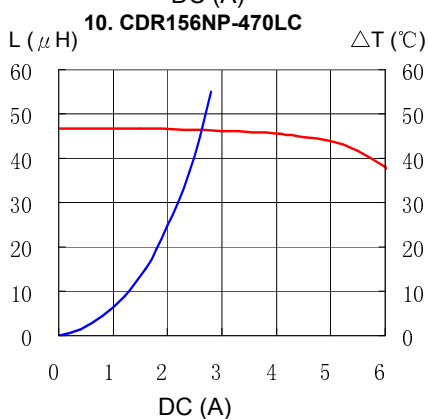
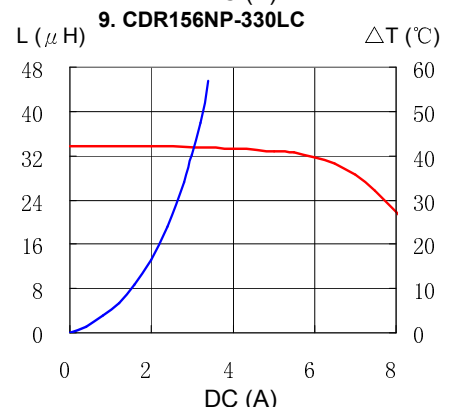
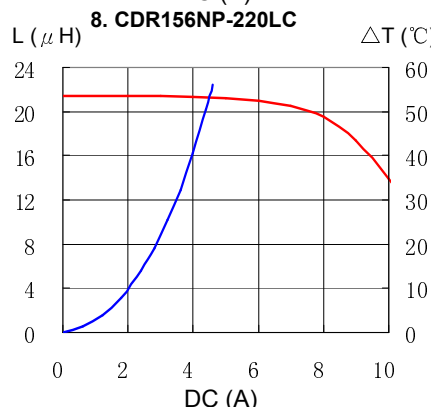
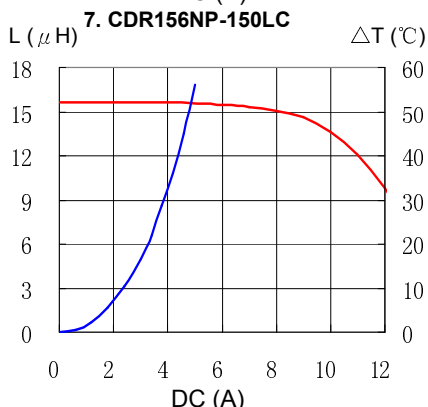
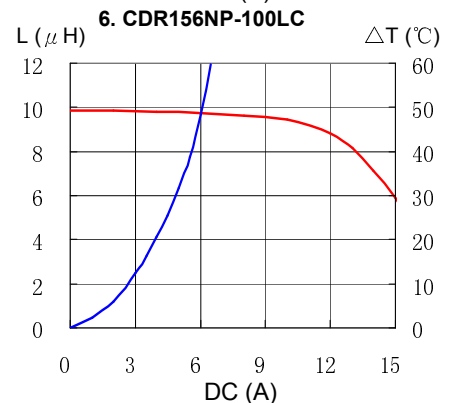
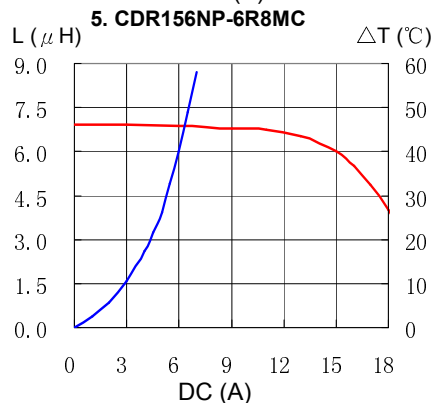
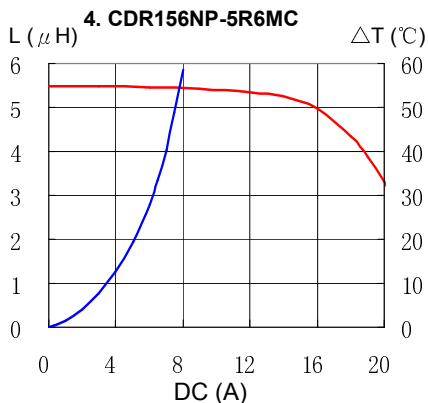
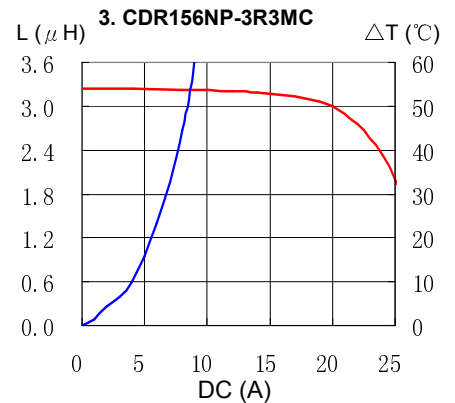
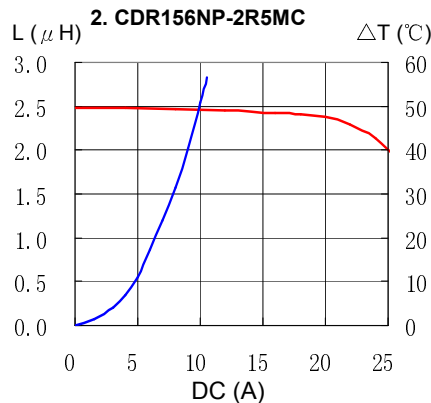
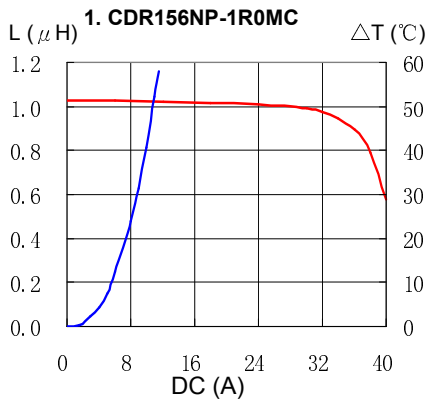
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t=40^{\circ}\text{C}$  ( $T_a=20^{\circ}\text{C}$ ).

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## Saturation Current & Temperature Rise Graph

— L (20°C)    —  $\Delta T$

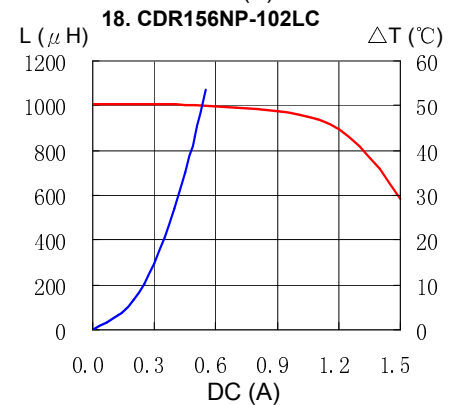
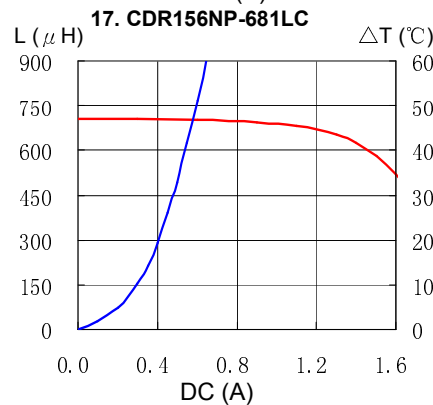
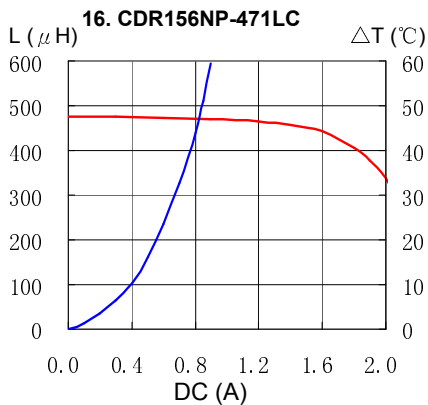
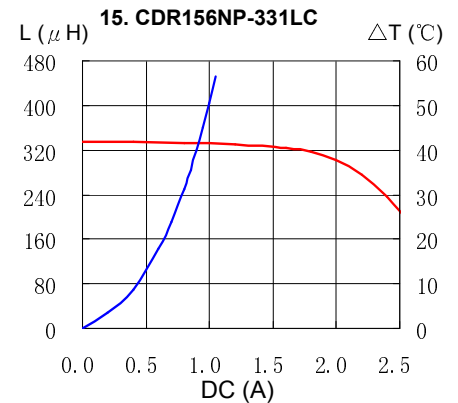
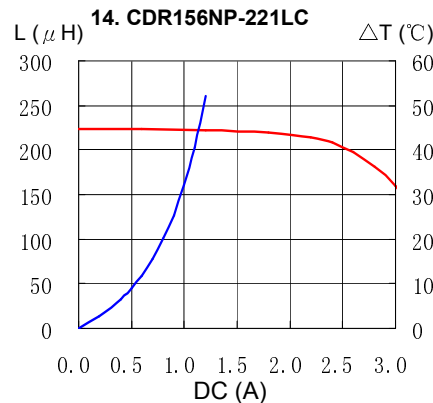
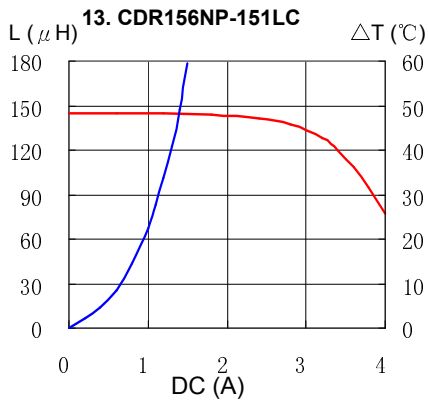


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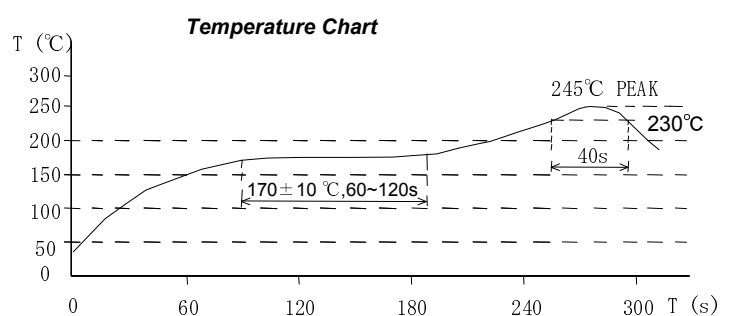
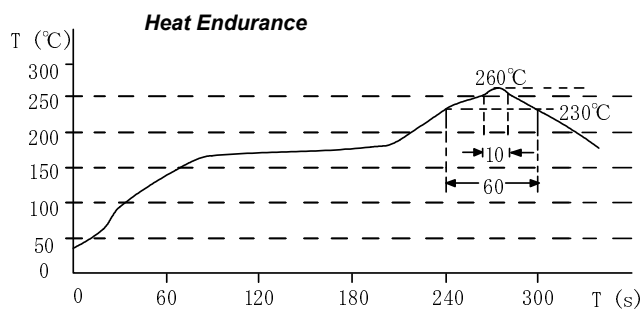


## Saturation Current & Temperature Rise Graph

— L (20°C)    —  $\Delta T$



## Solder Reflow Condition



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