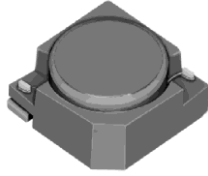




**THE DATASHEET OF  
CDC5D23BNP-181KC**



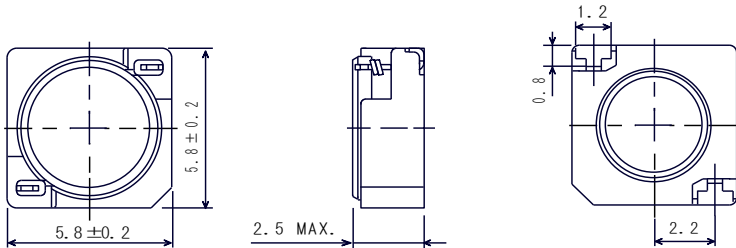
# SMD Power Inductor CDC5D23B



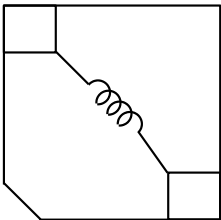
## Description

- Ferrite drum core construction.
- Magnetically unshielded.
- L × W × H: 6.0 × 6.0 × 2.5 mm Max.
- Product weight: 215mg(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

## Dimension - [mm]



## Schematics - [mm]



## 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
- 13.0" diameter reel
- 2000pcs per reel

## Applications

- Ideally used in EL drive as EL lamp inverter inductors.



### Electrical Characteristics

Part Name	Stamp	Inductance ( $\mu\text{H}$ ) [Within] ※1	D.C.R.(m $\Omega$ ) Max. (Typ.) (at20 $^{\circ}\text{C}$ )	Rated current (A) ※2
CDC5D23BNP-2R2MC	2R2	2.2 $\mu\text{H} \pm 20\%$	39 (30)	2.16
CDC5D23BNP-2R7MC	2R7	2.7 $\mu\text{H} \pm 20\%$	44 (34)	2.08
CDC5D23BNP-3R3MC	3R3	3.3 $\mu\text{H} \pm 20\%$	49 (38)	1.90
CDC5D23BNP-3R9MC	3R9	3.9 $\mu\text{H} \pm 20\%$	56 (43)	1.84
CDC5D23BNP-4R7MC	4R7	4.7 $\mu\text{H} \pm 20\%$	62 (48)	1.60
CDC5D23BNP-5R6MC	5R6	5.6 $\mu\text{H} \pm 20\%$	78 (60)	1.44
CDC5D23BNP-6R8MC	6R8	6.8 $\mu\text{H} \pm 20\%$	91 (70)	1.36
CDC5D23BNP-8R2MC	8R2	8.2 $\mu\text{H} \pm 20\%$	103(87)	1.12
CDC5D23BNP-100LC	100	10 $\mu\text{H} \pm 15\%$	133(102)	1.04
CDC5D23BNP-120LC	120	12 $\mu\text{H} \pm 15\%$	148(114)	0.96
CDC5D23BNP-150KC	150	15 $\mu\text{H} \pm 10\%$	166(128)	0.88
CDC5D23BNP-180KC	180	18 $\mu\text{H} \pm 10\%$	213(164)	0.77
CDC5D23BNP-220KC	220	22 $\mu\text{H} \pm 10\%$	248(191)	0.73
CDC5D23BNP-270KC	270	27 $\mu\text{H} \pm 10\%$	328(252)	0.64
CDC5D23BNP-330KC	330	33 $\mu\text{H} \pm 10\%$	378(291)	0.58
CDC5D23BNP-390KC	390	39 $\mu\text{H} \pm 10\%$	438(337)	0.54
CDC5D23BNP-470KC	470	47 $\mu\text{H} \pm 10\%$	546(420)	0.49
CDC5D23BNP-560KC	560	56 $\mu\text{H} \pm 10\%$	621(478)	0.45
CDC5D23BNP-680KC	680	68 $\mu\text{H} \pm 10\%$	715(550)	0.41
CDC5D23BNP-820KC	820	82 $\mu\text{H} \pm 10\%$	1000(772)	0.35
CDC5D23BNP-101KC	101	100 $\mu\text{H} \pm 10\%$	1070(820)	0.33
CDC5D23BNP-121KC	121	120 $\mu\text{H} \pm 10\%$	1250(960)	0.32
CDC5D23BNP-151KC	151	150 $\mu\text{H} \pm 10\%$	1660(1280)	0.26
CDC5D23BNP-181KC	181	180 $\mu\text{H} \pm 10\%$	1900(1460)	0.23
CDC5D23BNP-221KC	221	220 $\mu\text{H} \pm 10\%$	2440(1880)	0.21
CDC5D23BNP-271KC	271	270 $\mu\text{H} \pm 10\%$	2730(2100)	0.19

※1. Inductance measuring condition: at 100 kHz.

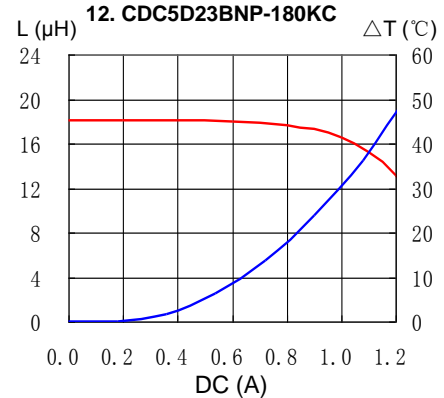
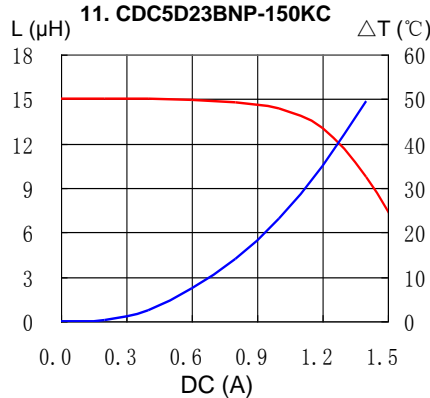
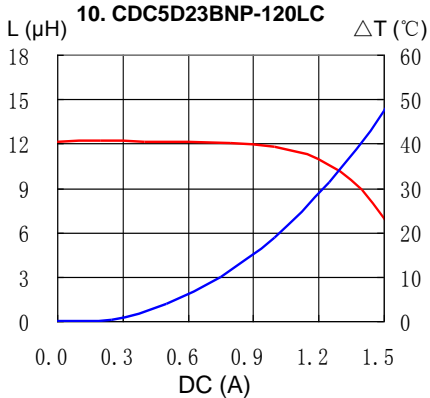
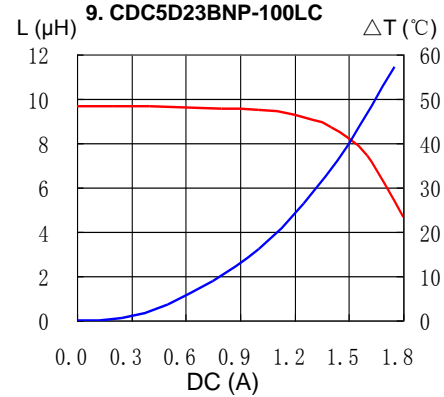
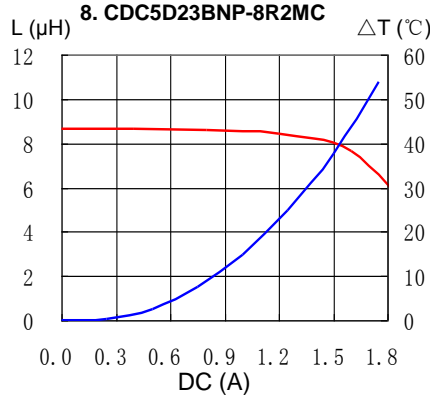
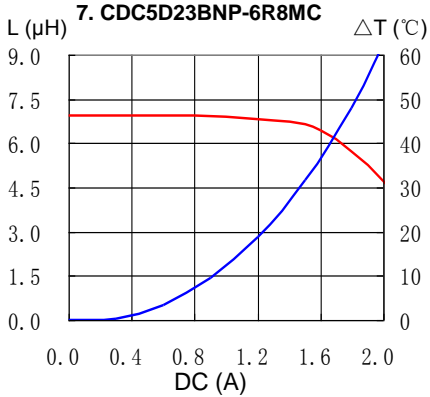
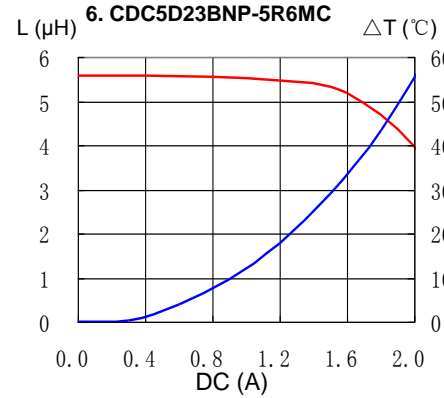
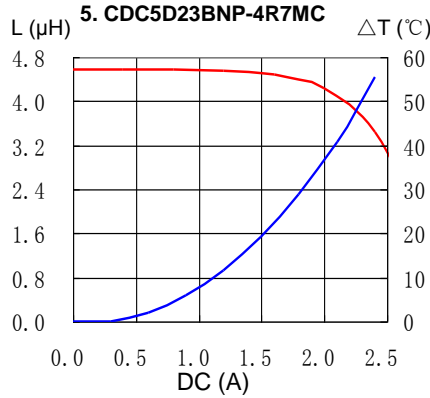
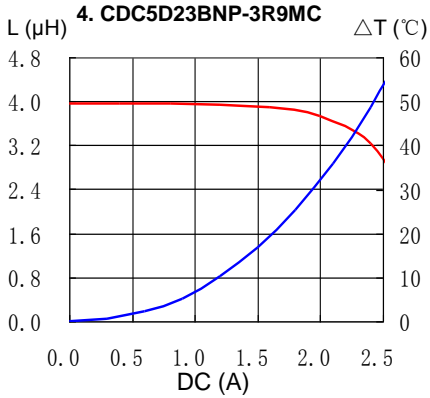
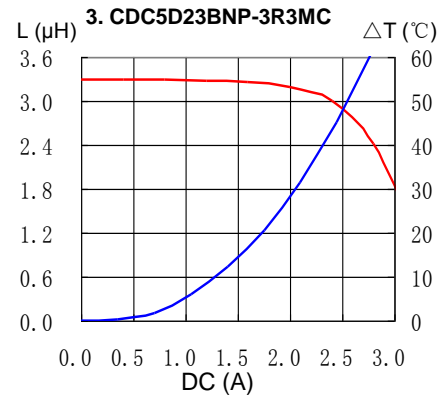
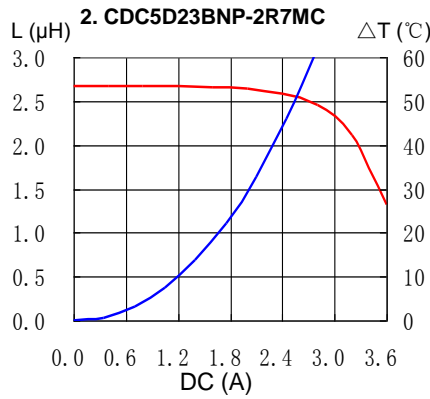
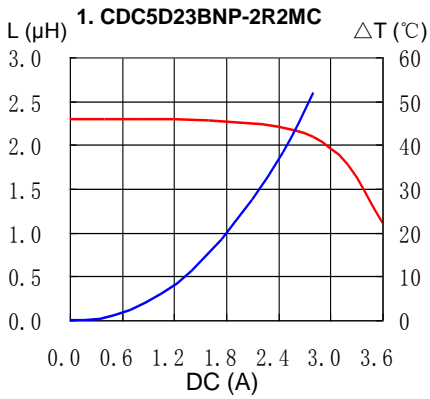
※2. Rated current: The DC current at which the inductance decreases to 90 % of it's initial value or when  $\Delta t = 40^{\circ}\text{C}$ , whichever is lower ( $T_a = 20^{\circ}\text{C}$ )

# SMD Power Inductor CDC5D23B



## Saturation Current & Temperature Rise Graph

— L (20°C)      —  $\Delta T$

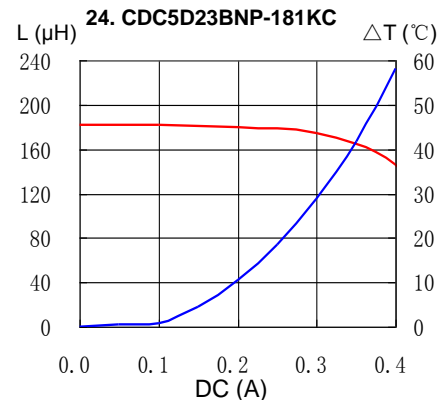
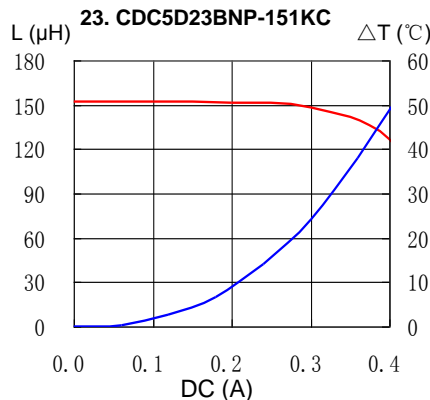
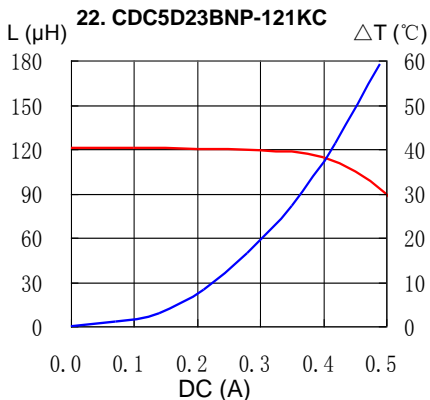
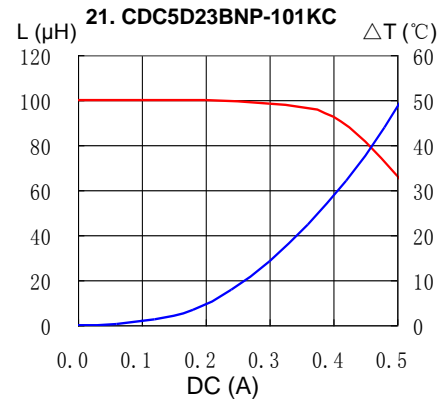
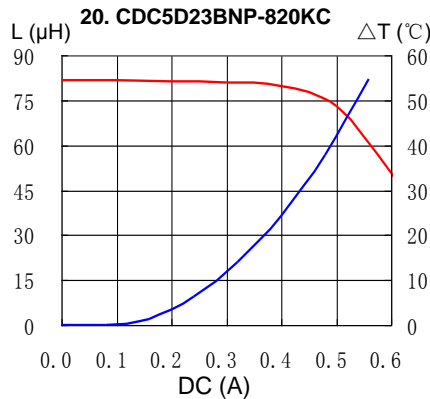
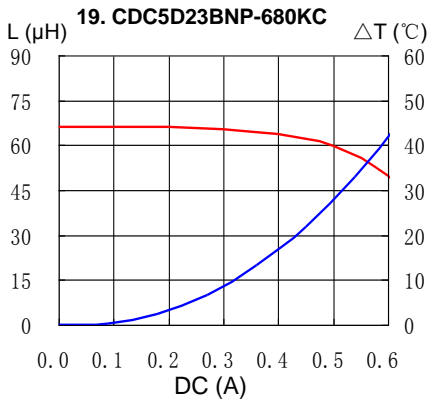
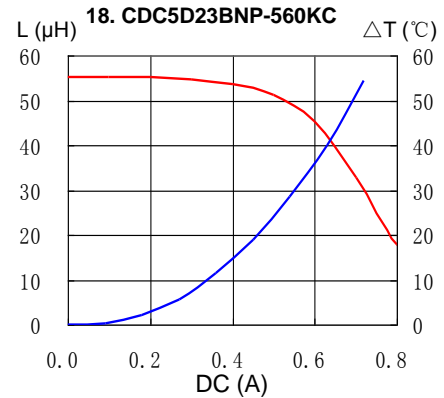
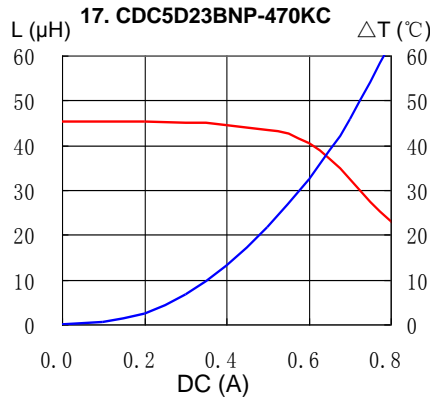
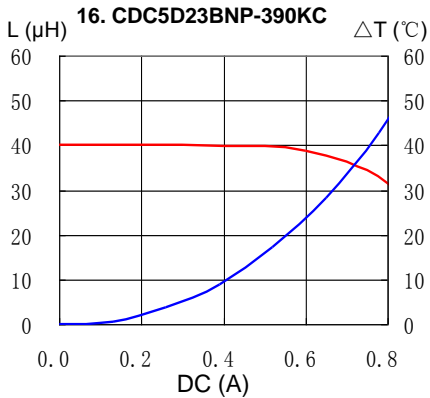
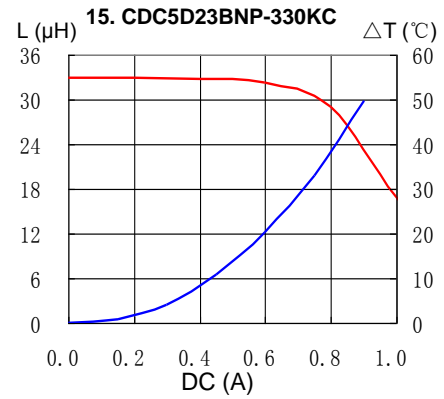
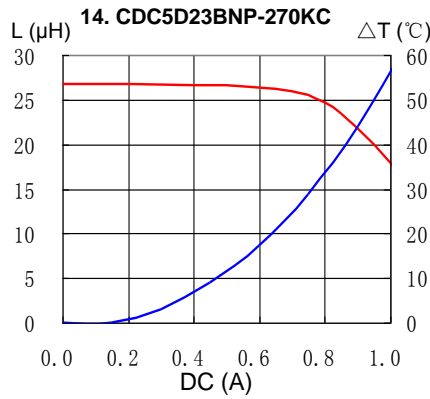
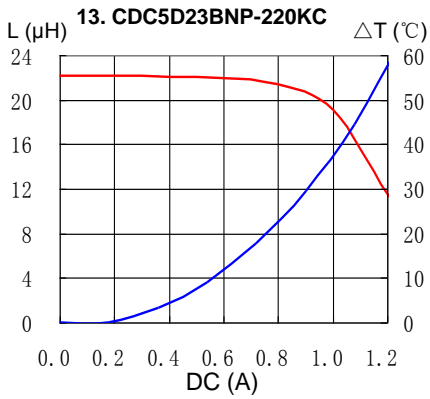


# SMD Power Inductor CDC5D23B

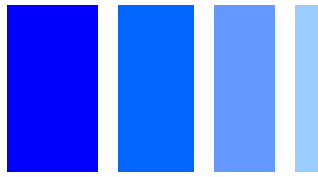


## Saturation Current & Temperature Rise Graph

— L (20°C)      —  $\Delta T$

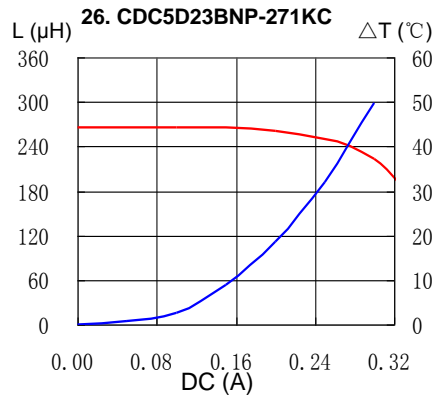
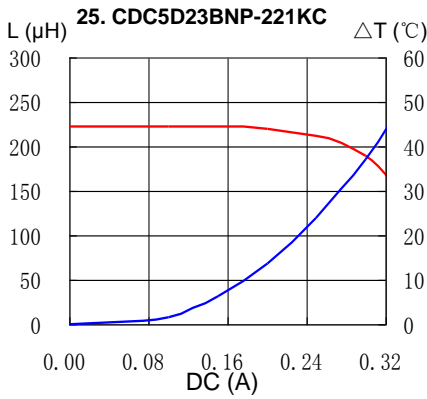


# SMD Power Inductor CDC5D23B



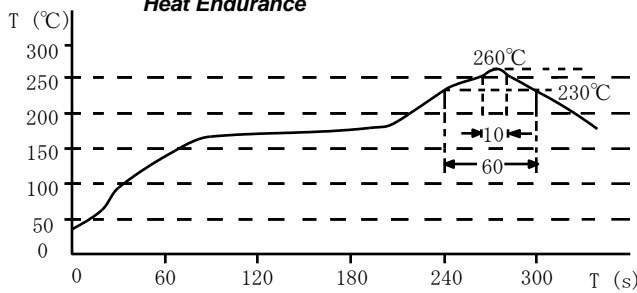
## Saturation Current & Temperature Rise Graph

— L (20°C)      —  $\Delta T$

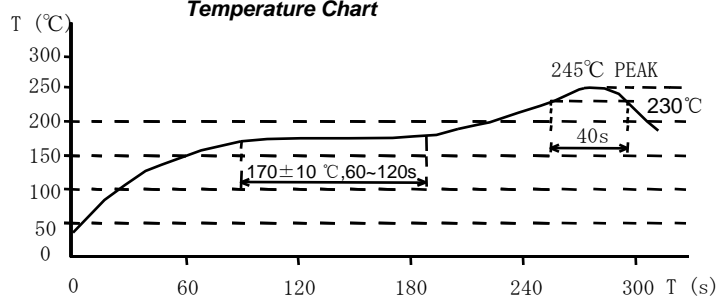


## Solder Reflow Condition

**Heat Endurance**



**Temperature Chart**



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