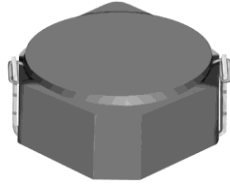


# SMD Power Inductor CDRH3D23



## Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 3.92 × 3.92 × 2.5 mm Max.
- Product weight: 112mg(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.

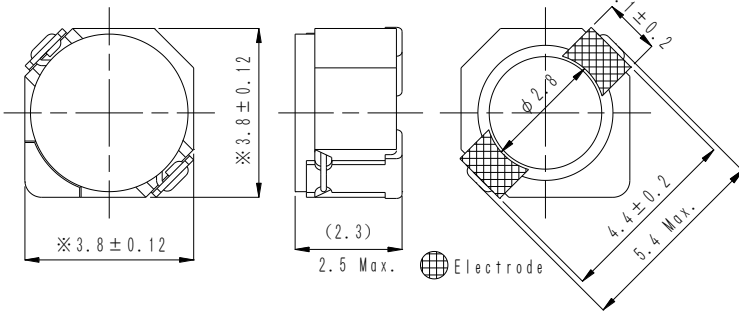
## Packaging

- Carrier tape and reel packaging
- 7.0" diameter reel
- 500pcs per reel

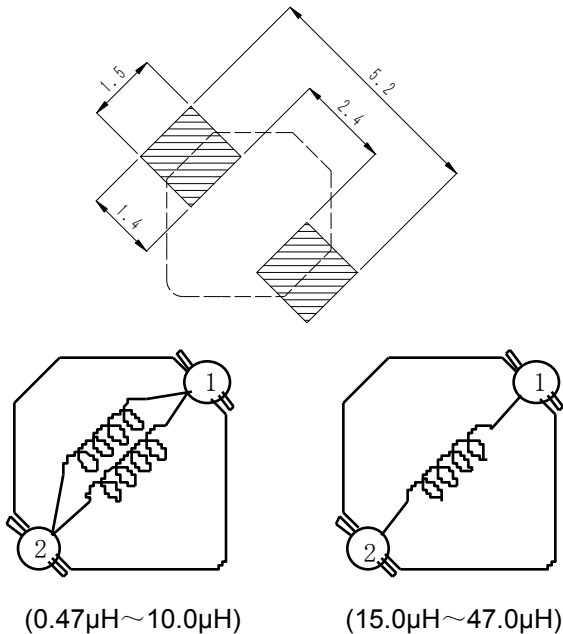
## Applications

- Ideally used in Mobilephone, PDA, MP3, DSC/DVC, etc as DC-DC converter inductors.

## Dimension - [mm]



## Land pattern and Schematics - [mm]



# SMD Power Inductor

## CDRH3D23



### Electrical Characteristics

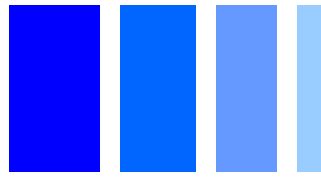
Part Name	Stamp	Inductance ( $\mu\text{H}$ ) [within] ※1	D.C.R. (m $\Omega$ ) Max. (Typ.) (at 20°C)	Saturation Current (A) ※2		Temperature Rise Current (A) ※3
				at 20°C	at 105°C	
CDRH3D23NP-R47NC	A	0.47 $\pm$ 30%	23.5(18.8)	3.10	2.40	3.30
CDRH3D23NP-1R0PC	A	1.0 $\pm$ 25%	25.0(20)	2.80	2.00	3.10
CDRH3D23NP-1R5PC	B	1.5 $\pm$ 25%	29.0(24)	2.20	1.65	2.90
CDRH3D23NP-2R2PC	C	2.2 $\pm$ 25%	38.3(31)	1.80	1.30	2.50
CDRH3D23NP-3R3PC	D	3.3 $\pm$ 25%	56.3(45)	1.45	1.10	2.20
CDRH3D23NP-4R7PC	E	4.7 $\pm$ 25%	68.8(55)	1.30	0.95	1.90
CDRH3D23NP-5R6PC	F	5.6 $\pm$ 25%	75.0(60)	1.10	0.80	1.80
CDRH3D23NP-6R8PC	G	6.8 $\pm$ 25%	87.8(72)	1.00	0.75	1.70
CDRH3D23NP-8R2PC	H	8.2 $\pm$ 25%	94.8(77)	0.95	0.70	1.60
CDRH3D23NP-100MC	I	10.0 $\pm$ 20%	117(95)	0.85	0.60	1.40
CDRH3D23NP-150MC	J	15.0 $\pm$ 20%	191(154)	0.70	0.50	0.85
CDRH3D23NP-220MC	K	22.0 $\pm$ 20%	270(219)	0.55	0.40	0.75
CDRH3D23NP-330MC	L	33.0 $\pm$ 20%	381(307)	0.50	0.35	0.60
CDRH3D23NP-470MC	M	47.0 $\pm$ 20%	546(441)	0.35	0.25	0.55

※1. Inductance measuring condition: at 100kHz.

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

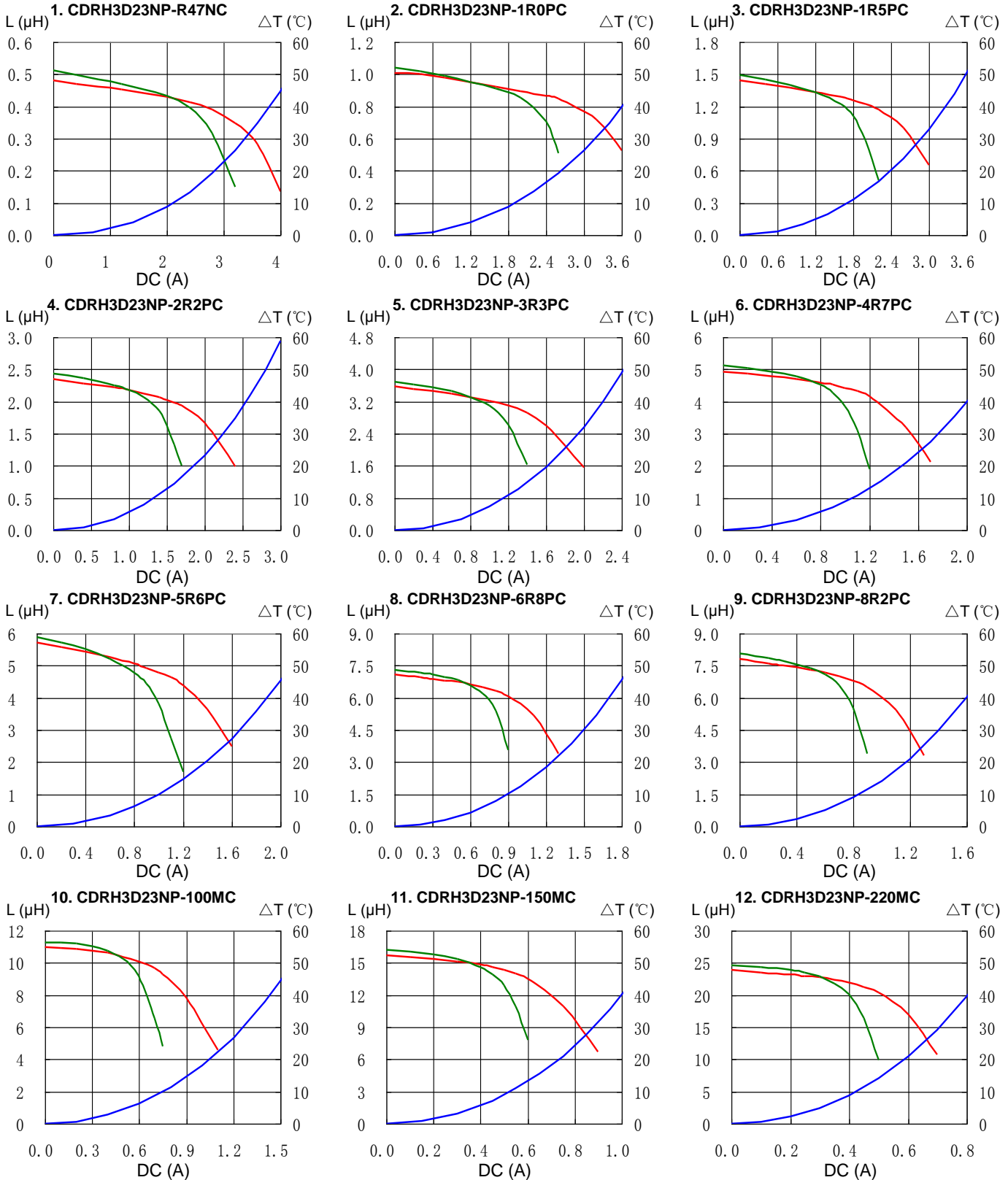
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t=40^\circ\text{C}$  ( $T_a=20^\circ\text{C}$ ).

# SMD Power Inductor CDRH3D23

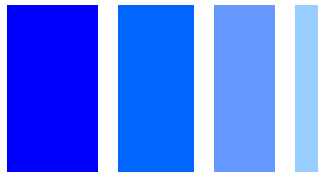


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

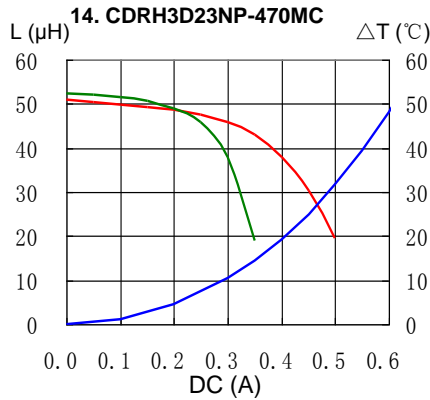
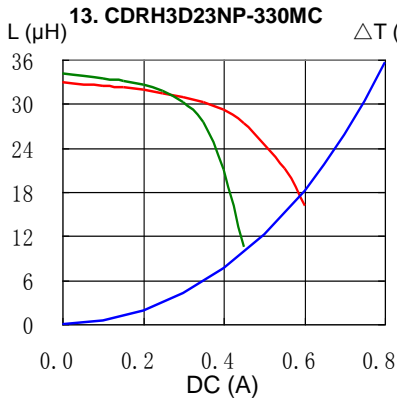


# SMD Power Inductor CDRH3D23



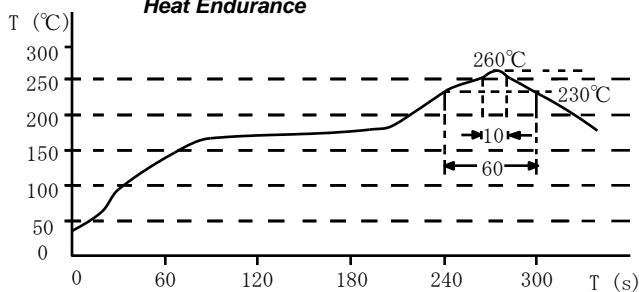
## Saturation Current & Temperature Rise Graph

— L (20°C) — L (100°C) —  $\Delta T$

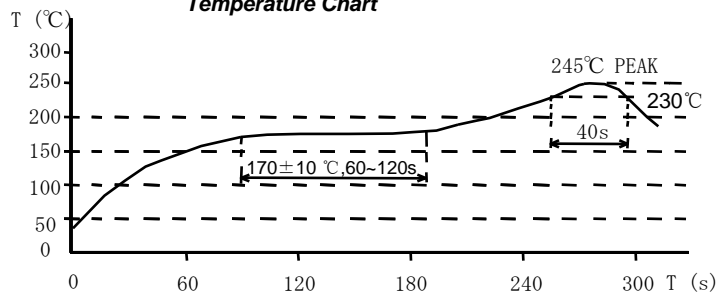


## Solder Reflow Condition

**Heat Endurance**



**Temperature Chart**



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