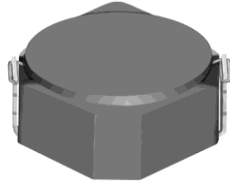


# SMD Power Inductor CDRH3D23/HP



## 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.

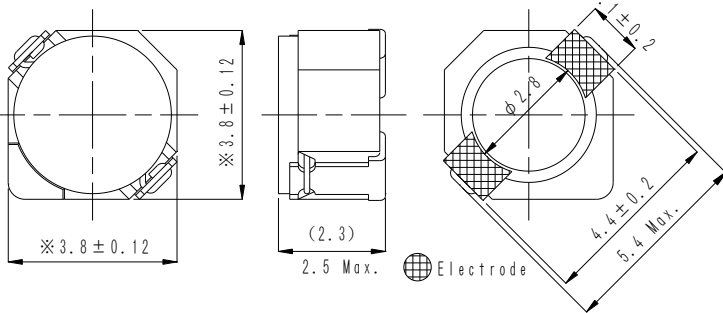
## Packaging

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

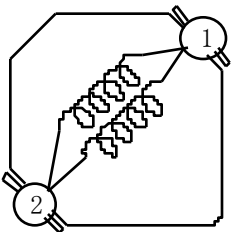
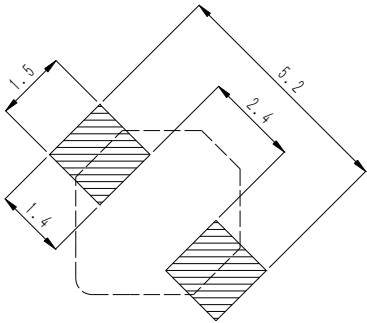
## Applications

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

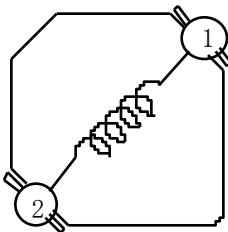
## Dimension - [mm]



## Land pattern and Schematics - [mm]



(1.2µH~8.2µH)



(10.0µH~47.0µH)

# SMD Power Inductor

## CDRH3D23/HP



### 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	
CDRH3D23HPNP-1R2PC	<u>B</u>	1.2 $\pm$ 25%	40.4(32.3)	3.52	3.00	2.55
CDRH3D23HPNP-2R2PC	<u>E</u>	2.2 $\pm$ 25%	50.3(40.2)	2.6	2.24	2.25
CDRH3D23HPNP-2R7PC	<u>F</u>	2.7 $\pm$ 25%	62.3(49.8)	2.4	2.08	2.0
CDRH3D23HPNP-3R3PC	<u>G</u>	3.3 $\pm$ 25%	70.0(56.0)	2.2	1.9	1.85
CDRH3D23HPNP-4R7PC	<u>J</u>	4.7 $\pm$ 25%	95.5(76.4)	1.84	1.57	1.60
CDRH3D23HPNP-5R6PC	<u>K</u>	5.6 $\pm$ 25%	102(81.2)	1.66	1.44	1.50
CDRH3D23HPNP-6R8PC	<u>L</u>	6.8 $\pm$ 25%	136(109)	1.52	1.30	1.30
CDRH3D23HPNP-8R2PC	<u>N</u>	8.2 $\pm$ 25%	145(116)	1.36	1.18	1.25
CDRH3D23HPNP-100MC	A	10 $\pm$ 20%	198(158)	1.28	1.08	1.02
CDRH3D23HPNP-120MC	B	12 $\pm$ 20%	249(199)	1.14	0.97	0.95
CDRH3D23HPNP-150MC	C	15 $\pm$ 20%	276(221)	1.02	0.88	0.90
CDRH3D23HPNP-220MC	E	22 $\pm$ 20%	383(306)	0.80	0.65	0.70
CDRH3D23HPNP-330MC	G	33 $\pm$ 20%	555(444)	0.68	0.58	0.58
CDRH3D23HPNP-470MC	J	47 $\pm$ 20%	798(638)	0.56	0.48	0.45

※1. Inductance measuring condition: at 100kHz.

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

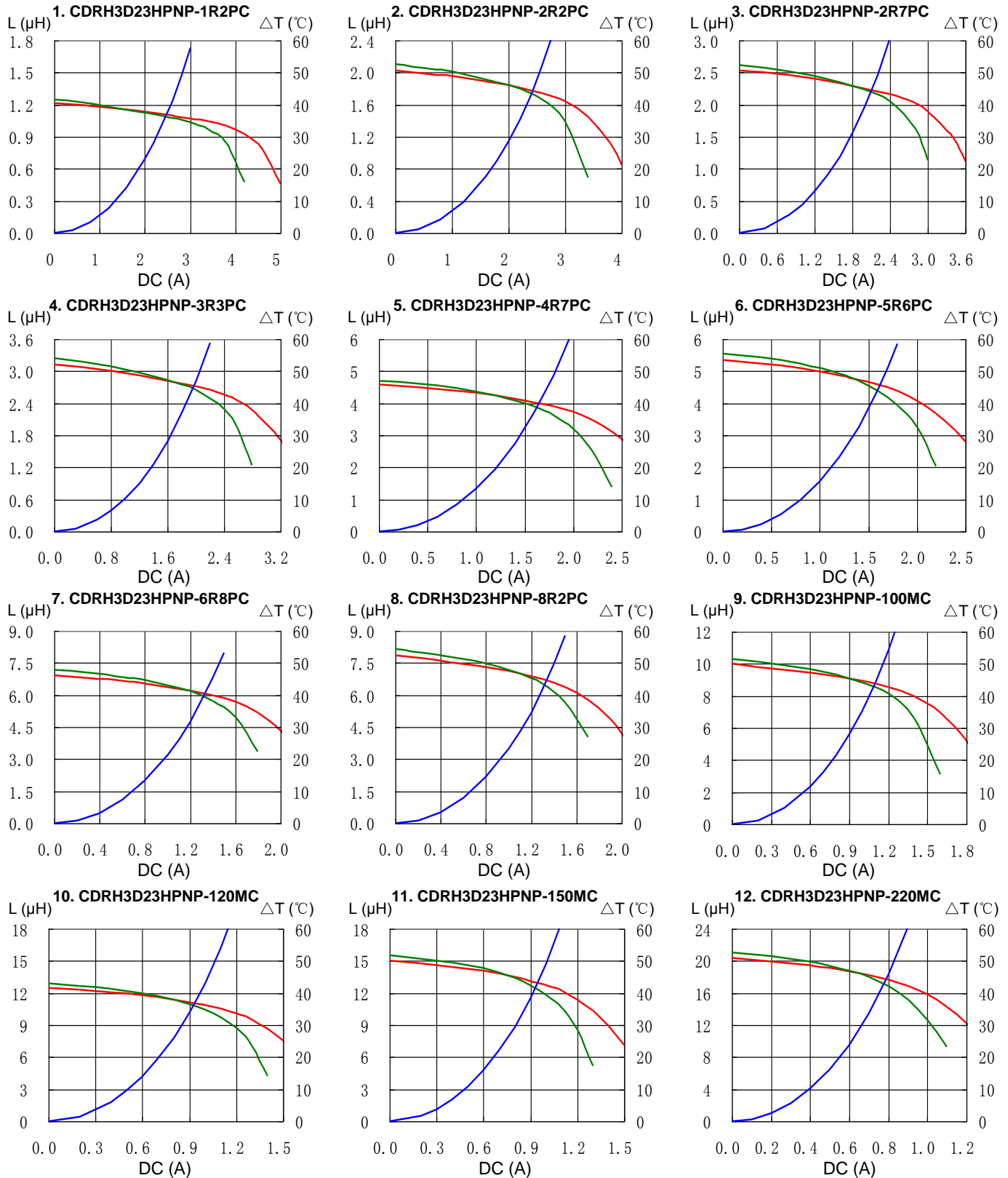
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t=40^\circ\text{C}$  ( $T_a=20^\circ\text{C}$ ).

# SMD Power Inductor CDRH3D23/HP

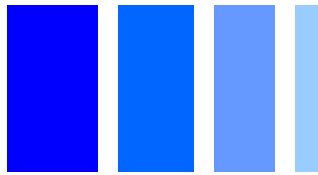


## Saturation Current & Temperature Rise Graph

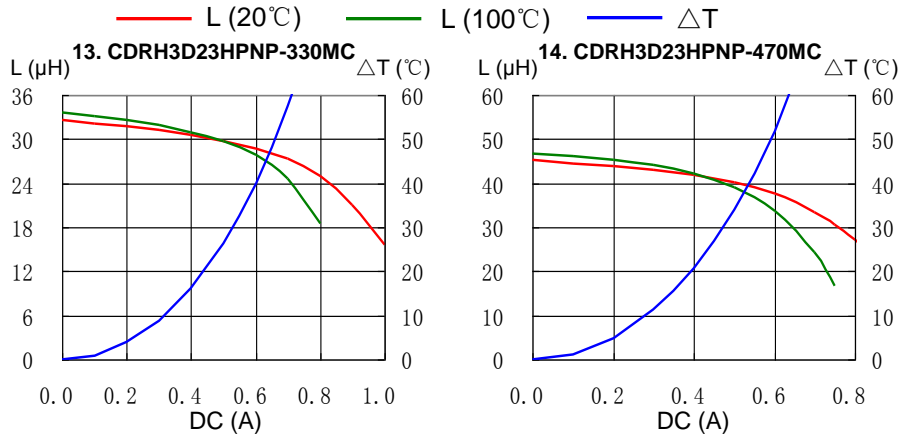
— L (20°C) — L (100°C) —  $\Delta T$



# SMD Power Inductor CDRH3D23/HP

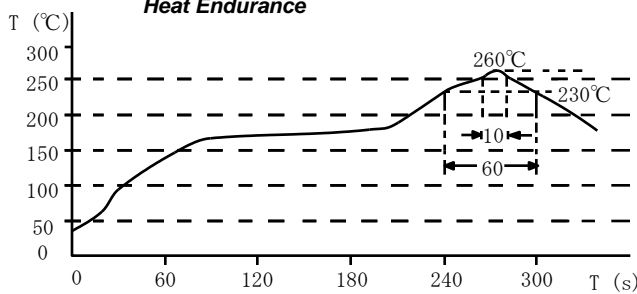


## Saturation Current & Temperature Rise Graph

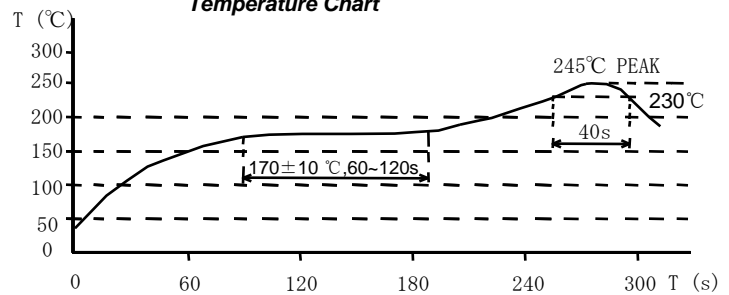


## Solder Reflow Condition

Heat Endurance



Temperature Chart



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