

SMD Power Inductor

CDRH50D18R

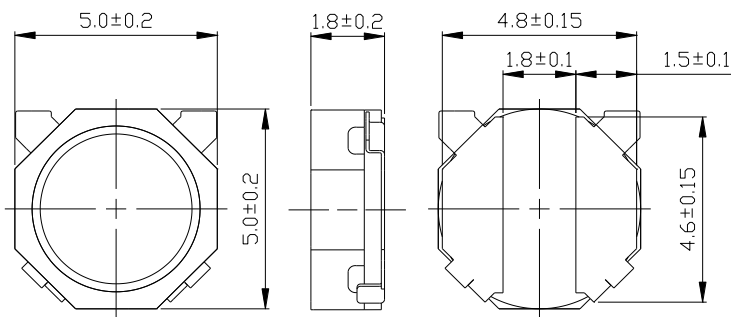


RoHS

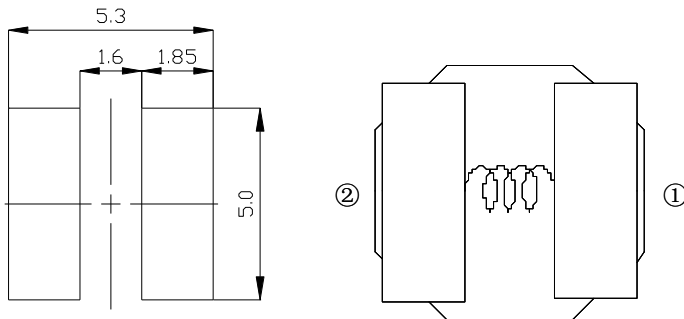
Halogen
Free



Dimension - [mm]



Land pattern and Schematics - [mm]



Description

- Ferrite drum core construction.
- Magnetically shielded.
- $L \times W \times H$: $5.2 \times 5.2 \times 2.0$ mm Max.
- Product weight: 0.16 g (Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

Environmental Data

- Operating temperature range: $-40^{\circ}\text{C} \sim +105^{\circ}\text{C}$ (including coil's self temperature rise)
- Storage temperature range: $-40^{\circ}\text{C} \sim +105^{\circ}\text{C}$
- Solder reflow temperature: 260°C peak.

Packaging

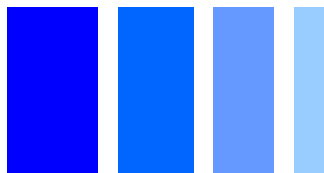
- Carrier tape and reel packaging
- 13.0" diameter reel
- 3000pcs per reel

Applications

- Lens of digital single lens reflex camera.

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Electrical Characteristics

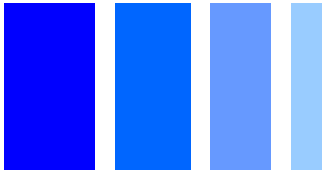
Part No.	Stamp	Inductance (μ H) 100kHz	D.C.R.(m Ω) [Within] (at 20°C)	Saturation current (A) ※1		Temperature Rise current (A) ※2
				(at 20°C)	(at 105°C)	
CDRH50D18RHF-1R0NC	A	1.0 $\pm$ 30%	19 $\pm$ 25%	3.40	2.70	4.10
CDRH50D18RHF-1R5NC	B	1.5 $\pm$ 30%	23 $\pm$ 25%	3.10	2.40	3.70
CDRH50D18RHF-2R2NC	C	2.2 $\pm$ 30%	27 $\pm$ 25%	2.40	2.00	3.40
CDRH50D18RHF-3R3NC	D	3.3 $\pm$ 30%	39 $\pm$ 25%	2.10	1.70	2.50
CDRH50D18RHF-4R7NC	E	4.7 $\pm$ 30%	50 $\pm$ 25%	1.70	1.40	2.20
CDRH50D18RHF-6R8NC	F	6.8 $\pm$ 30%	73 $\pm$ 25%	1.40	1.20	1.80
CDRH50D18RHF-8R2NC	G	8.2 $\pm$ 30%	97 $\pm$ 25%	1.20	1.05	1.65
CDRH50D18RHF-100MC	H	10 $\pm$ 20%	113 $\pm$ 25%	1.10	0.95	1.55
CDRH50D18RHF-150MC	I	15 $\pm$ 20%	177 $\pm$ 25%	0.95	0.80	1.30
CDRH50D18RHF-220MC	J	22 $\pm$ 20%	238 $\pm$ 25%	0.85	0.65	1.10
CDRH50D18RHF-330MC	K	33 $\pm$ 20%	347 $\pm$ 25%	0.65	0.52	0.90
CDRH50D18RHF-470MC	L	47 $\pm$ 20%	590 $\pm$ 25%	0.53	0.44	0.70
CDRH50D18RHF-680MC	M	68 $\pm$ 20%	1054 $\pm$ 25%	0.46	0.37	0.48
CDRH50D18RHF-820MC	N	82 $\pm$ 20%	1180 $\pm$ 25%	0.40	0.33	0.43
CDRH50D18RHF-101MC	P	100 $\pm$ 20%	1300 $\pm$ 25%	0.34	0.29	0.38

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

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

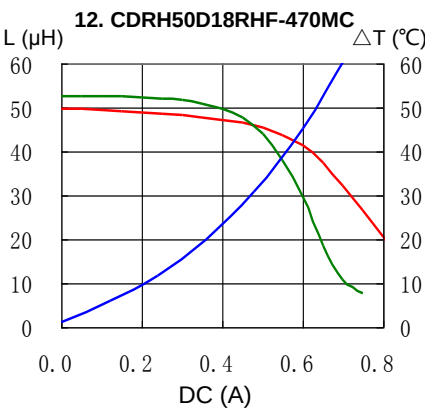
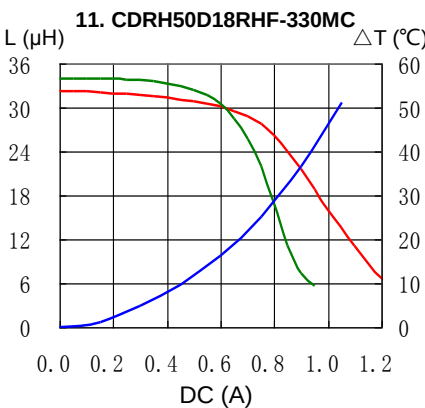
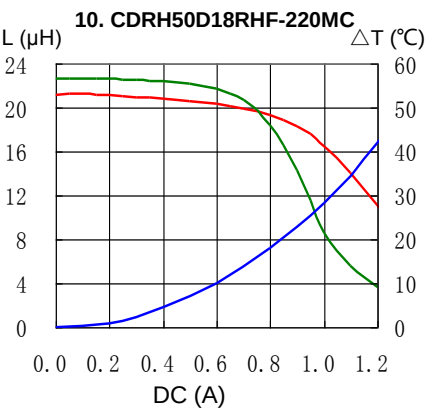
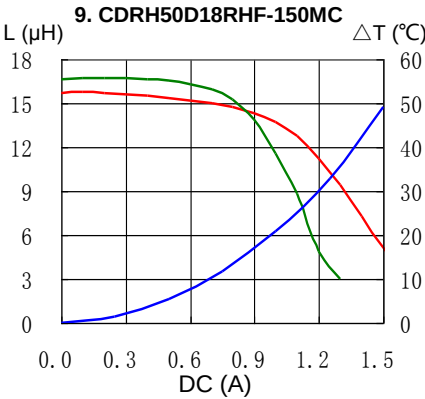
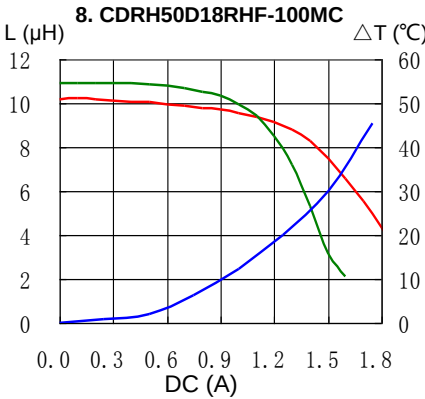
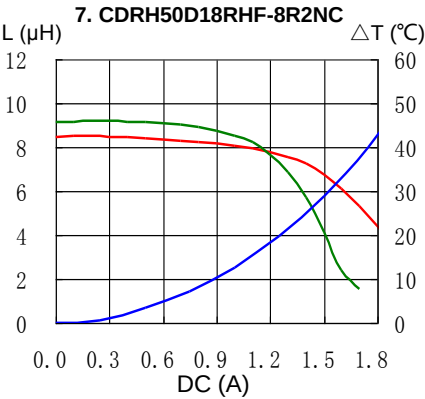
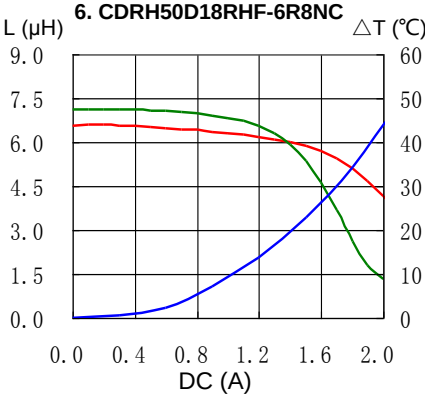
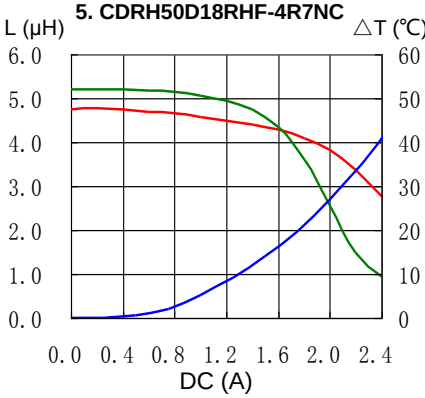
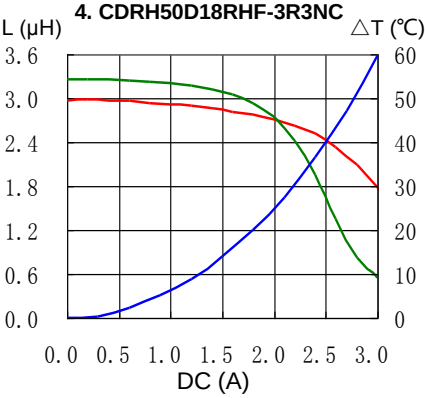
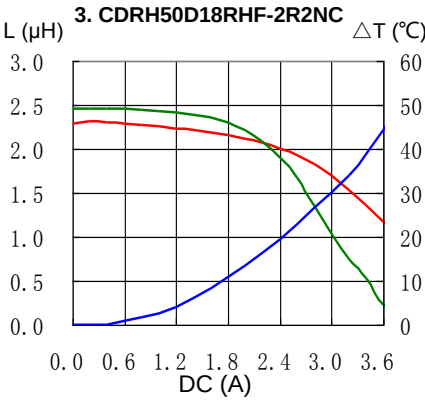
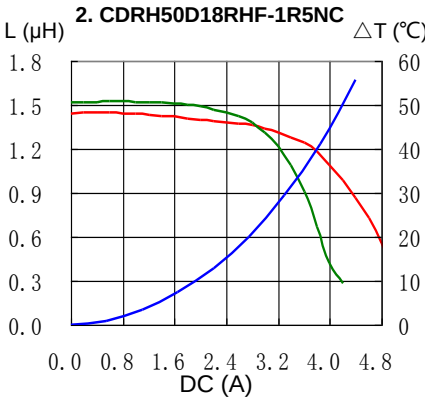
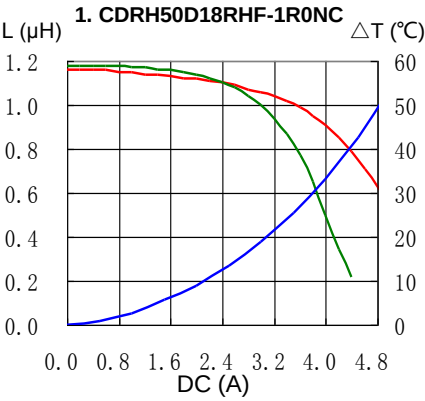
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Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) — ΔT

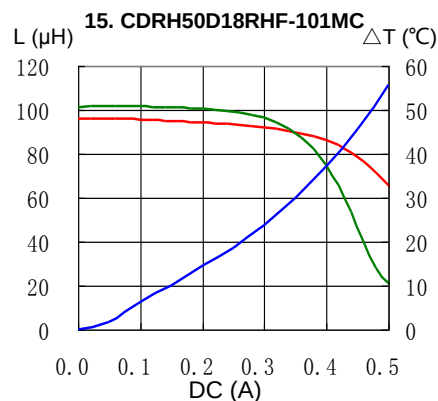
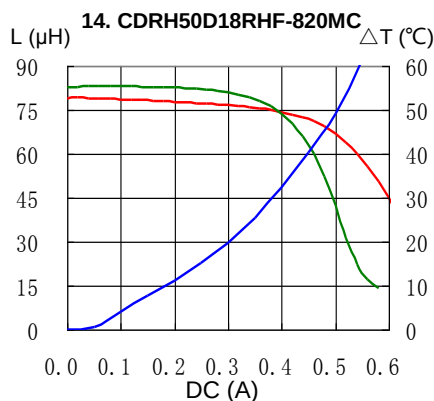
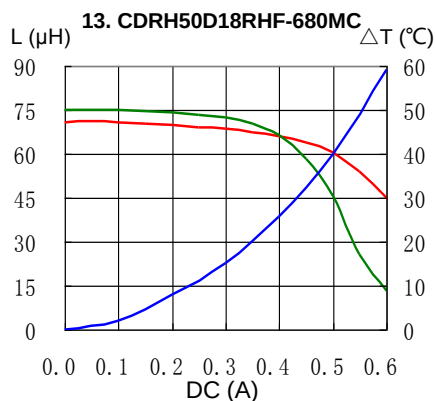


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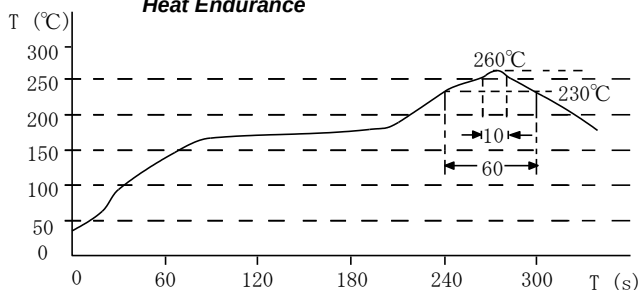
Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) — ΔT

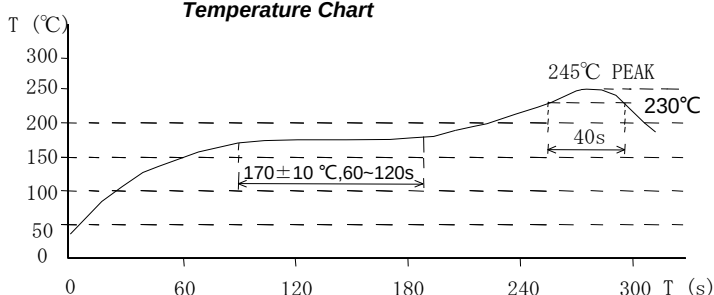


Solder Reflow Condition

Heat Endurance



Temperature Chart



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

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