

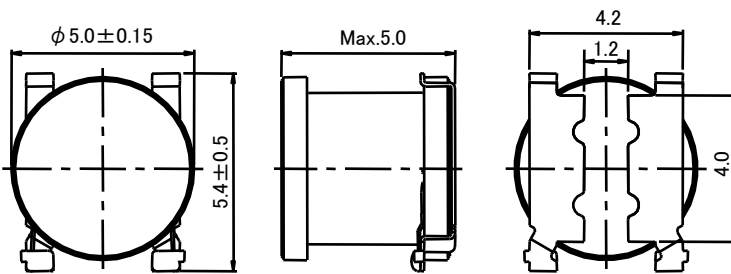
SMD Power Inductor CDH50D48



Description

- Ferrite drum core construction
- Magnetically unshielded
- L × W × H: 5.15 × 5.9 × 5.0 mm Max.
- Product weight: 0.4g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

Dimension - [mm]



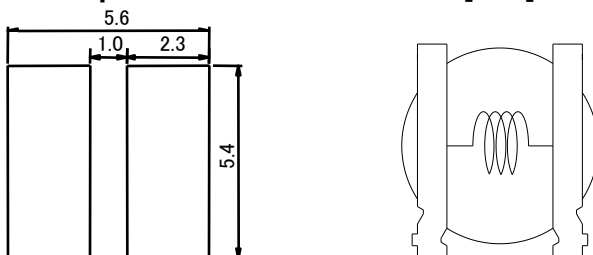
Environmental Data

- 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

Land pattern and Schematics - [mm]



Applications

- input filter of LED lighting.

Electrical Characteristics

Sumida P/N	Inductance (μ H) at 100kHz	D.C.R. (Ω) at 20°C ※1	Saturation Current (mA) ※2		Temperature Rise Current (mA) ※3
			(at 20°C)	(at 105°C)	
CDH50D48NP-101KC	100 ± 10%	0.54(0.43)	600	480	650
CDH50D48NP-151KC	150 ± 10%	0.88(0.70)	490	400	500
CDH50D48NP-221KC	220 ± 10%	1.13(0.90)	410	330	450
CDH50D48NP-331KC	330 ± 10%	1.88(1.57)	330	270	330
CDH50D48NP-471KC	470 ± 10%	2.59(2.16)	275	225	270
CDH50D48NP-681KC	680 ± 10%	3.84(3.20)	240	190	230
CDH50D48NP-102KC	1000 ± 10%	6.72(5.60)	190	150	165
CDH50D48NP-152KC	1500 ± 10%	10.6(8.82)	155	120	135
CDH50D48NP-222KC	2200 ± 10%	16.0(13.3)	130	100	105
CDH50D48NP-332KC	3300 ± 10%	26.6(22.2)	105	80	80
CDH50D48NP-472KC	4700 ± 10%	33.8(28.2)	90	65	75

※1. () are typical value.

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

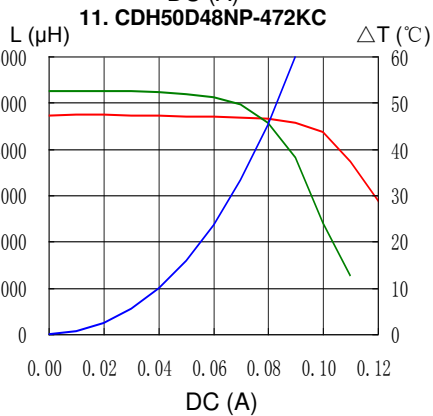
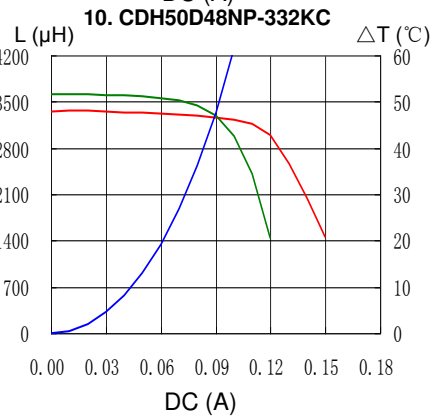
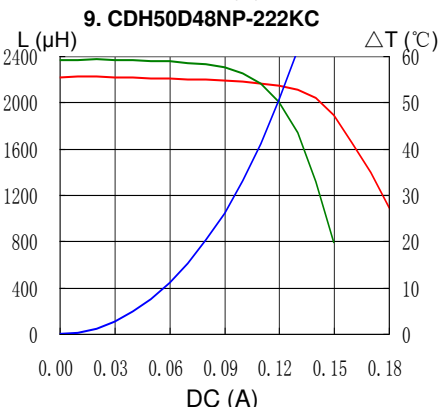
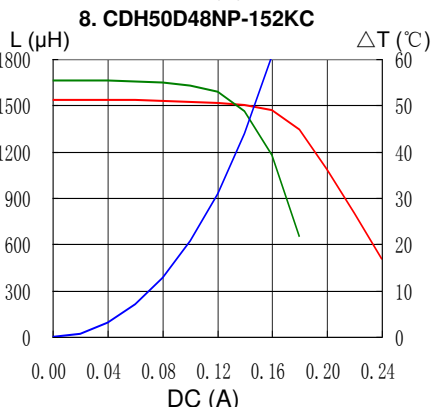
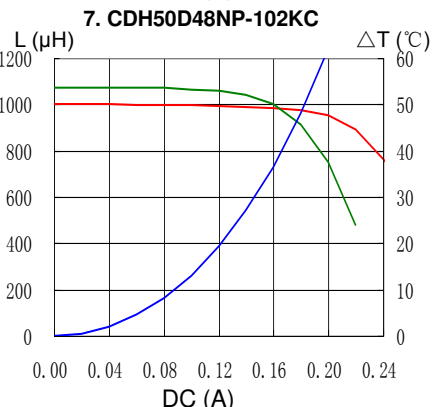
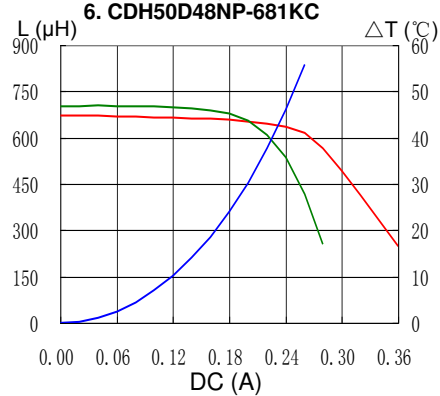
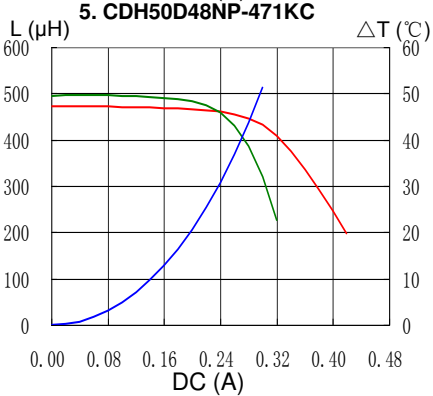
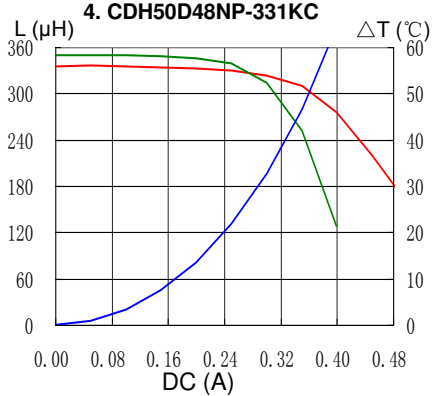
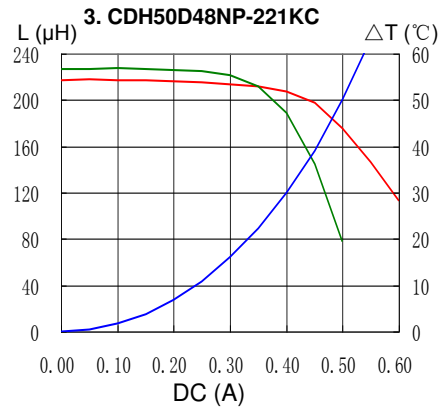
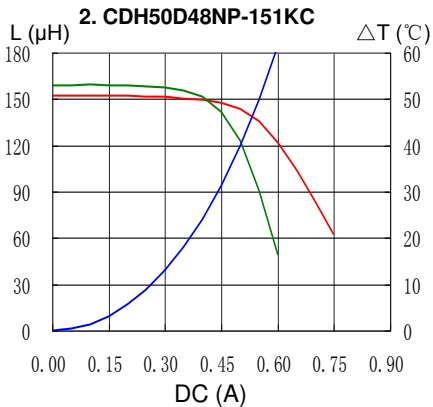
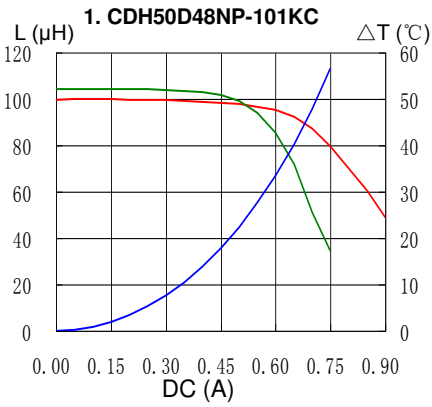
※3. Temperature rise current: The value of D.C. current when the temperature rise is $\Delta t = 40^\circ\text{C}$ ($T_a = 20^\circ\text{C}$).

SMD Power Inductor CDH50D48

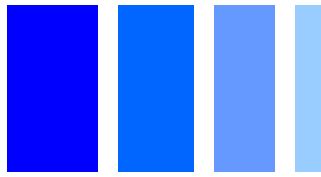


Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) — ΔT

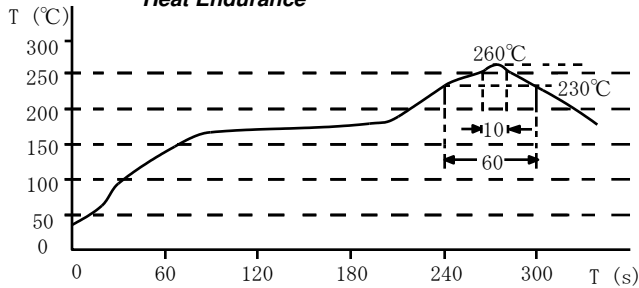


SMD Power Inductor CDH50D48

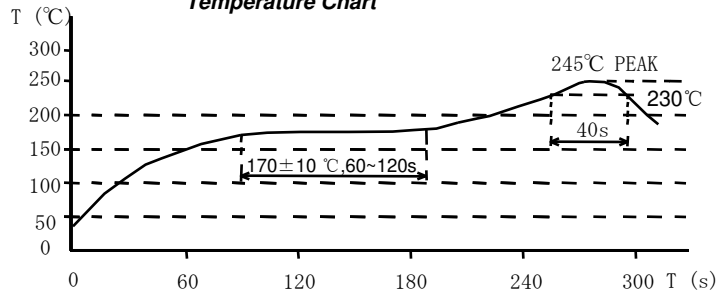


Solder Reflow Condition

Heat Endurance



Temperature Chart



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

Hong Kong

Tel. +852-2880-6781
FAX. +852-2565-9600
sales@hk.sumida.com

Saitama(Japan)

Tel. +81-48-691-7300
FAX. +81-48-691-7340
sales@jp.sumida.com

Chicago

Tel. +1-847-545-6700
FAX. +1-847-545-6720
sales@us.sumida.com

Shanghai

Tel. +86-21-5836-3299
FAX. +86-21-5836-3266
shanghai.sales@cn.sumida.com

Seoul

Tel. +82-2-6237-0777
FAX. +82-2-6237-0778
sales@kr.sumida.com

Obernzell

Tel. +49-8591-937-0
FAX. +49-8591-937-103
contact@eu.sumida.com

Shenzhen

Tel. +86-755-8291-0228
FAX. +86-755-8291-0338
shenzhen.sales@cn.sumida.com

Singapore

Tel. +65-6296-3388
FAX. +65-6841-4426
sales@sg.sumida.com

Neumarkt

Tel. +49-9181-4509-110
FAX. +49-9181-4509-310
infocomp@eu.sumida.com

Taipei

Tel. +886-2-8751-2737
FAX. +886-2-8751-2738
sales@tw.sumida.com

San Jose

Tel. +1-408-321-9660
FAX. +1-408-321-9308
sales@us.sumida.com