

Description

- Low profile 4.0 mm max
- Inductance range from 1.5 uH to 330 uH
- Current range from 10.0 to 0.70 Amps
- Ferrite Shielded, low EMI

Applications

- Computer and portable power devices
- LCD panels, DVD players
- DC-DC converters
- Buck, boost, forward, and resonant converters
- Noise filtering and filter chokes

Environmental Data

- Storage temperature range: -40°C to +125°C
- Operating ambient temperature range: -40°C to +85°C (range is application specific)
- Infrared reflow temperature: +260°C for 10 seconds



Part Number	Rated Inductance (μH)	OCL nominal (1) ± 30% (μH)	I _{rms} (2) Amperes	I _{sat} (3) Amperes	DCR (mΩ) Max. @ 20°C
CD1-1R5	1.5	1.5	8.30	10.00	8.1
CD1-2R5	2.5	2.5	7.30	7.50	10.0
CD1-3R8	3.8	3.8	6.55	6.00	13.0
CD1-5R2	5.2	5.2	5.05	5.50	22.0
CD1-7R0	7.0	7.0	4.55	4.80	27.0
CD1-100	10.0	10.0	4.00	4.40	35.0
CD1-150	15.0	15.0	3.35	3.60	50.0
CD1-220	22.0	22.0	2.77	2.90	73.0
CD1-330	33.0	33.0	2.45	2.30	93.0
CD1-470	47.0	47.0	2.09	2.10	128
CD1-680	68.0	68.0	1.62	1.50	213
CD1-101	100	100	1.36	1.35	304
CD1-151	150	150	1.05	1.15	506
CD1-221	220	220	0.86	0.92	756
CD1-331	330	330	0.72	0.70	1090

1) Test Parameters: 100kHz, 0.25 Vrms

2) I_{rms} Amperes for approximately ΔT of 40°C above 85°C ambient

3) I_{sat} Amperes Peak for 35% max. rolloff (@20°C)

Units supplied in tape and reel packaging. 13" reels 600 parts per reel.
Carrier tape width = 24 mm. Meets EIA-481 standard

Part number definition:

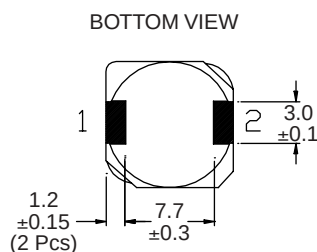
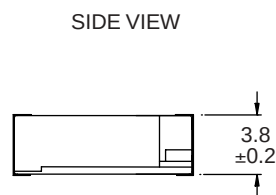
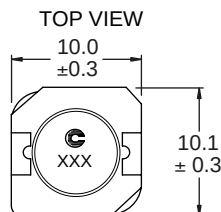
First 3 characters = Product code and size.

Last 3 characters = Inductance in μH.

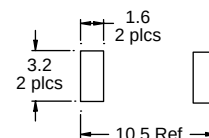
R = decimal point.

If no R is present third character = # of zeros.

Mechanical Diagrams

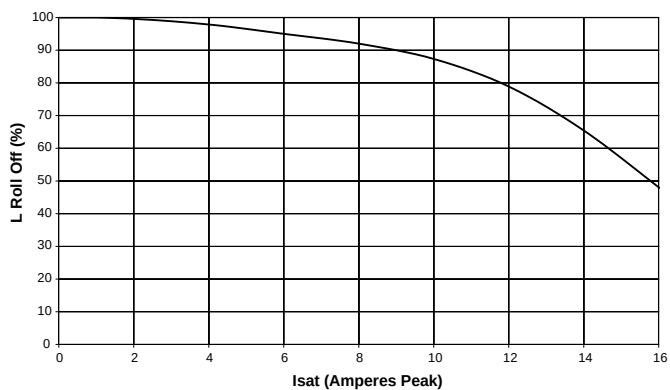


RECOMMENDED PCB LAYOUT

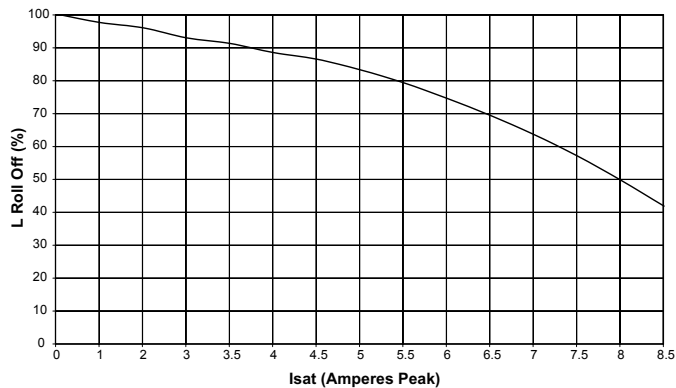


Dimensions in Millimeters. All soldering surfaces are coplanar within 0.10 mm.

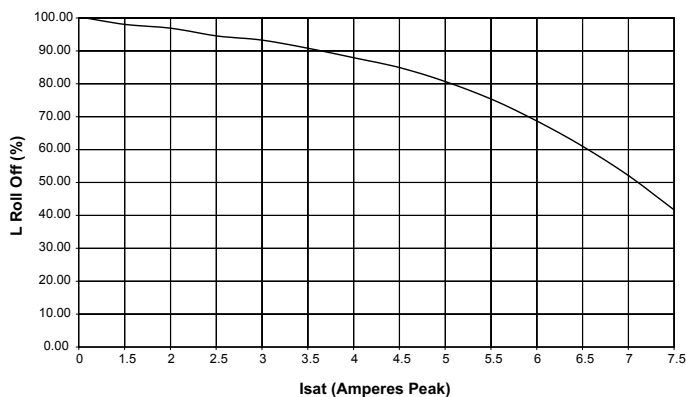
Typical Inductance vs Idc
CD1-1R5



Typical Inductance vs Idc
CD1-5R2



Typical Inductance vs Idc
CD1-7R0



Typical Inductance vs Idc
CD1-100

