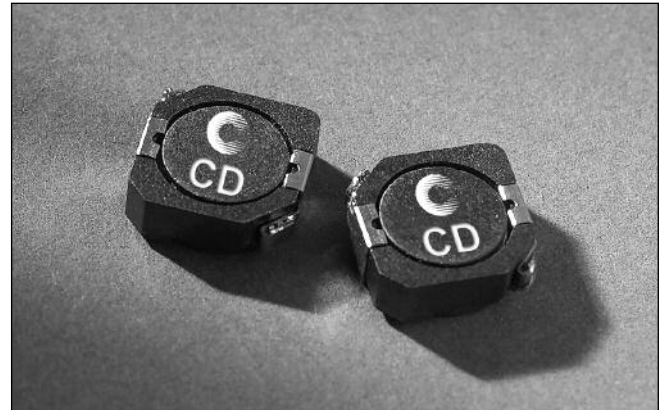


Description

- 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
- Ferrite core material



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)
- Solder reflow temperature: +260°C max. for 10 seconds

Packaging

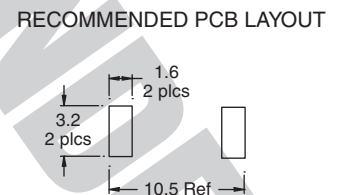
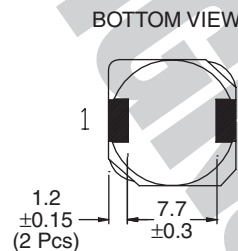
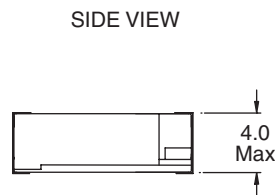
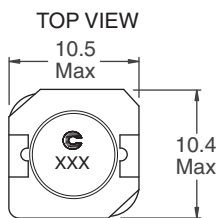
- Supplied in tape and reel packaging, 600 parts per 13" reel

| 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-R | 1.5 | 1.5 | 8.30 | 10.00 | 8.1 |
| CD1-2R5-R | 2.5 | 2.5 | 7.30 | 7.50 | 10.0 |
| CD1-3R8-R | 3.8 | 3.8 | 6.55 | 6.00 | 13.0 |
| CD1-5R2-R | 5.2 | 5.2 | 5.05 | 5.50 | 22.0 |
| CD1-7R0-R | 7.0 | 7.0 | 4.55 | 4.80 | 27.0 |
| CD1-100-R | 10.0 | 10.0 | 4.00 | 4.40 | 35.0 |
| CD1-150-R | 15.0 | 15.0 | 3.35 | 3.60 | 50.0 |
| CD1-220-R | 22.0 | 22.0 | 2.77 | 2.90 | 73.0 |
| CD1-330-R | 33.0 | 33.0 | 2.45 | 2.30 | 93.0 |
| CD1-470-R | 47.0 | 47.0 | 2.09 | 2.10 | 128 |
| CD1-680-R | 68.0 | 68.0 | 1.62 | 1.50 | 213 |
| CD1-820-R | 82.0 | 82.0 | 1.50 | 1.45 | 256 |
| CD1-101-R | 100 | 100 | 1.36 | 1.35 | 304 |
| CD1-151-R | 150 | 150 | 1.05 | 1.15 | 506 |
| CD1-221-R | 220 | 220 | 0.86 | 0.92 | 756 |
| CD1-331-R | 330 | 330 | 0.72 | 0.70 | 1090 |

1) Test Parameters: 100kHz, 0.25 V_{rms}
 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)

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. - R suffix indicated RoHS compliant

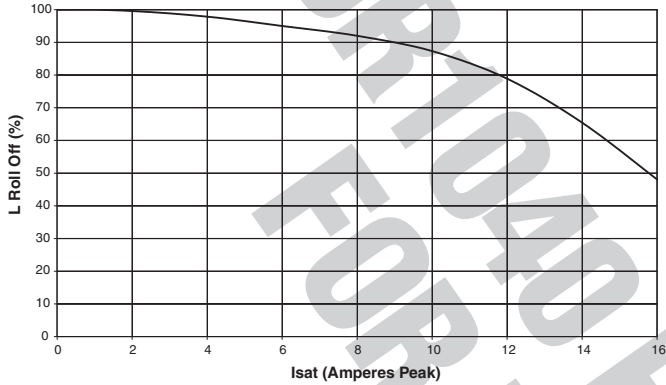
Mechanical Diagrams



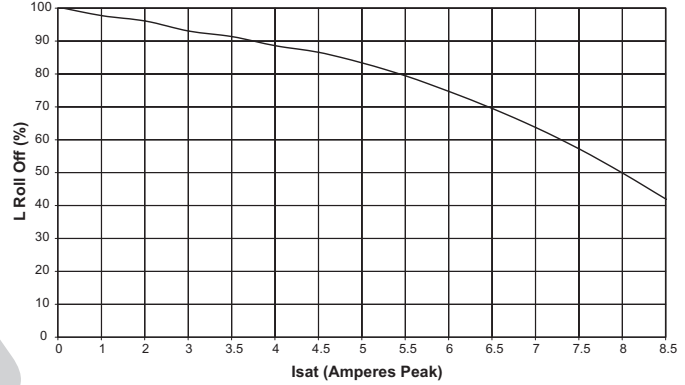
Dimensions in Millimeters.

Inductance Characteristics

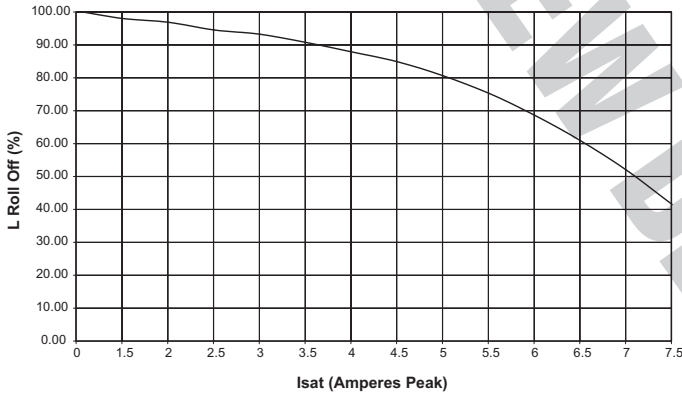
Typical Inductance vs Idc
CD1-1R5



Typical Inductance vs Idc
CD1-5R2



Typical Inductance vs Idc
CD1-7R0



Typical Inductance vs Idc
CD1-100

