COILTRONICS®



# **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

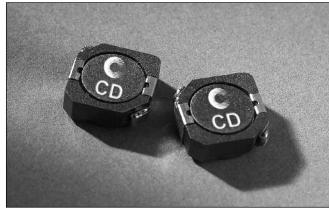
# **Applications**

- 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	Rated	OCL nominal (1)	Irms (2)	Isat (3)	DCR (mΩ)
Number	Inductance (µH)	± 30% (µH)	Amperes	Amperes	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

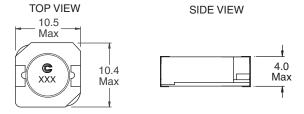
<sup>1)</sup> Test Parameters: 100kHz, 0.25 Vrms

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**



**BOTTOM VIEW** ±0.15 ±0.3 (2 Pcs)

3.2

RECOMMENDED PCB LAYOUT

10.5 Ref

Dimensions in Millimeters

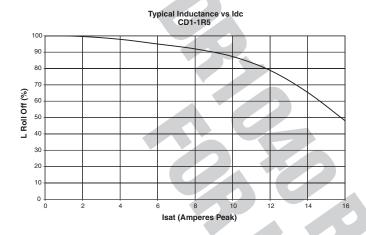
<sup>2)</sup> Irms Amperes for approximately ΔT of 40°C above 85°C ambient 3) Isat Amperes Peak for 35% max. rolloff (@20°C)

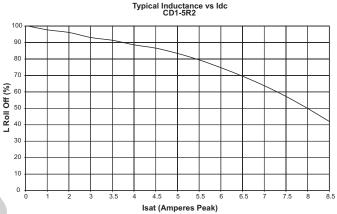


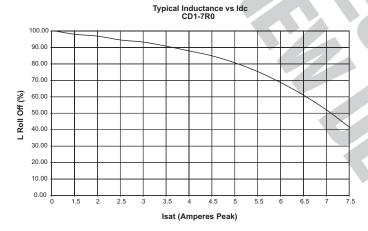
**High Power Density,** Low Profile, Shielded Inductors

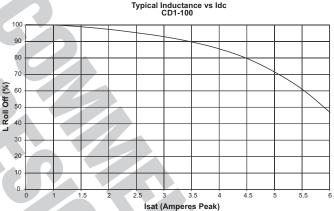
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#### **Inductance Characteristics**











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