

### Description

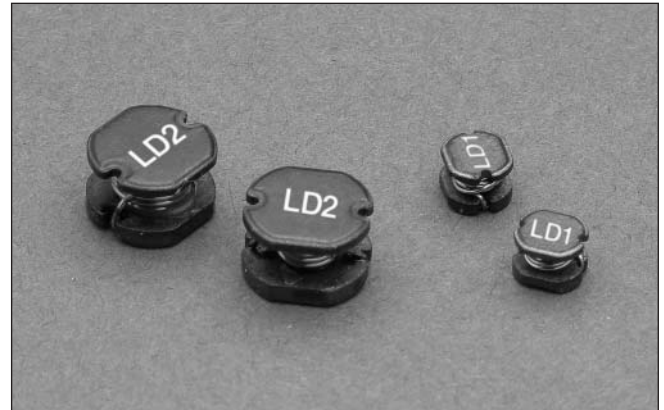
- Metalized drum core design utilizes board space
- Current Range from 4.46 to 0.52 Amps
- Inductance range from 1.0 uH to 470uH
- RoHS compliant (-R option)

### Applications

- Buck or Boost inductor
- Noise filtering and output filter chokes
- Computers
- Power Supplies
- Test Equipment Instrumentation

### Environmental Data

- Storage temperature: -25°C to +85°C
- Operating ambient temperature: -20°C to +80°C (Range is application specific). Temperature rise is approximately 40°C at rated rms current.
- IR reflow temperature: 240°C for 30 seconds max.



### Packaging

- Supplied in tape and reel packaging, LD1 (2,000), LD2 (1,000) parts per reel

Part Number	Rated Inductance (μH)	OCL (1) Nominal	I <sub>rms</sub> (2) Amperes	I <sub>sat</sub> (3) Amperes	DCR (4) (Ω) (Max.)
LD1-1R0	1.0	1.00	2.66	4.46	0.0330
LD1-1R4	1.4	1.40	2.47	3.41	0.0380
LD1-1R8	1.8	1.80	2.35	3.05	0.0420
LD1-2R2	2.2	2.20	2.22	2.76	0.0470
LD1-2R7	2.7	2.70	2.11	2.52	0.0520
LD1-3R3	3.3	3.30	2.00	2.32	0.0580
LD1-3R9	3.9	3.90	1.75	2.14	0.0760
LD1-4R7	4.7	4.70	1.57	2.00	0.0940
LD1-5R6	5.6	5.60	1.51	1.75	0.1010
LD1-6R8	6.8	6.80	1.41	1.56	0.1170
LD1-8R2	8.2	8.20	1.32	1.41	0.1320
LD1-100	10	10.0	1.13	1.28	0.1820
LD1-120	12	12.0	1.05	1.18	0.2100
LD1-150	15	15.0	0.99	1.05	0.2350
LD1-180	18	18.0	0.83	0.98	0.3380
LD1-220	22	22.0	0.78	0.89	0.3780
LD1-270	27	27.0	0.67	0.87	0.5220
LD1-330	33	33.0	0.66	0.75	0.5400
LD1-390	39	39.0	0.63	0.68	0.5870
LD1-470	47	47.0	0.52	0.61	0.8440
LD1-560	56	56.0	0.50	0.57	0.9370
LD1-680	68	68.0	0.46	0.52	1.12

Notes:

- 1) Open Circuit Inductance Test Parameters: 100kHz, 0.25Vrms, 0.0Adc +/-20% except for LD1-330 to LD1-680 and LD2-470 to LD2-471 which is +/-10%
- 2) RMS current for for an approximate T of 40°C. It is recommended that the temperature of the part not exceed 125°C

3) Peak current for an approximate 10% rolloff at 20°C

4) DCR limits @ 20°C

Part Number	Rated Inductance (μH)	OCL (1) Nominal	I <sub>rms</sub> (2) Amperes	I <sub>sat</sub> (3) Amperes	DCR (4) (Ω) (Max.)
LD2-100	10	10.0	3.83	3.45	0.0700
LD2-120	12	12.0	3.57	3.20	0.0800
LD2-150	15	15.0	3.38	2.85	0.0900
LD2-180	18	18.0	3.19	2.60	0.1000
LD2-220	22	22.0	3.13	2.45	0.1100
LD2-270	27	27.0	2.81	2.10	0.1200
LD2-330	33	33.0	2.70	2.01	0.1300
LD2-390	39	39.0	2.42	1.85	0.1600
LD2-470	47	47.0	2.25	1.64	0.1800
LD2-560	56	56.0	1.96	1.50	0.2400
LD2-680	68	68.0	1.88	1.35	0.2800
LD2-820	82	82	1.63	1.28	0.3700
LD2-101	100	100	1.53	1.15	0.4300
LD2-121	120	120	1.43	1.09	0.4700
LD2-151	150	150	1.23	0.95	0.6400
LD2-181	180	180	1.15	0.87	0.7100
LD2-221	220	220	1.00	0.79	0.9600
LD2-271	270	270	0.94	0.73	1.11
LD2-331	330	330	0.83	0.64	1.26
LD2-391	390	390	0.78	0.58	1.77
LD2-471	470	470	0.74	0.55	1.96

Notes:

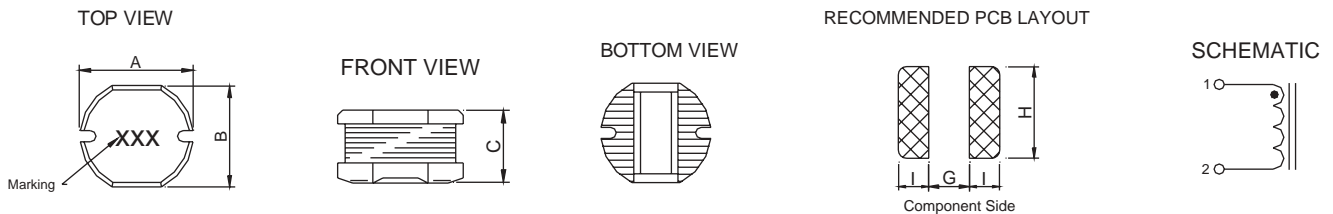
- 1) Open Circuit Inductance Test Parameters: 100kHz, 0.25V<sub>rms</sub>, 0.0A<sub>dc</sub> +/-20% except for LD1-330 to LD1-680 and LD2-470 to LD2-471 which is +/-10%
- 2) RMS current for for an approximate T of 40°C. It is recommended that the temperature of the part not exceed 125°C

3) Peak current for an approximate 10% rolloff at 20°C

4) DCR limits @ 20°C

OPTION CODE	
Option Code	Description
-R	RoHS compliant version

**Mechanical Diagrams**



Marking:

LD1: xxx=inductance value per family chart

LD2: "C" logo

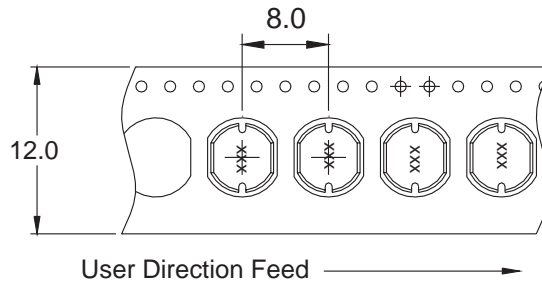
xxx=inductance value

Dimension	A +/-0.3	B +/-0.3	C +/-0.3	G ref	H ref	I ref
LD1	4.5	4.0	3.2	1.5	4.5	1.75
LD2	7.8	7.0	5.0	2.0	7.5	3.0

Dimensions in millimeters.

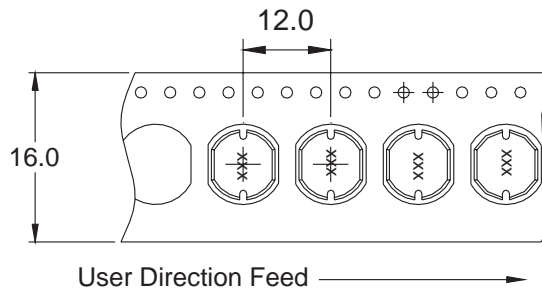
**Packaging Information**

LD1 Series



Parts packaged on 13" Diameter reel,  
2,000 parts per reel.

LD2 Series



Parts packaged on 13" Diameter reel,  
1,000 parts per reel.

**Rolloff**

