

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
- Ferrite core material



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.
- Solder reflow temperature: 260°C max. for 10 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 _{rms} (2) Amperes	I _{sat} (3) Amperes	DCR (4) (Ω) (Max.)
LD1-1R0-R	1.0	1.00	2.66	4.46	0.0330
LD1-1R4-R	1.4	1.40	2.47	3.41	0.0380
LD1-1R8-R	1.8	1.80	2.35	3.05	0.0420
LD1-2R2-R	2.2	2.20	2.22	2.76	0.0470
LD1-2R7-R	2.7	2.70	2.11	2.52	0.0520
LD1-3R3-R	3.3	3.30	2.00	2.32	0.0580
LD1-3R9-R	3.9	3.90	1.75	2.14	0.0760
LD1-4R7-R	4.7	4.70	1.57	2.00	0.0940
LD1-5R6-R	5.6	5.60	1.51	1.75	0.1010
LD1-6R8-R	6.8	6.80	1.41	1.56	0.1170
LD1-8R2-R	8.2	8.20	1.32	1.41	0.1320
LD1-100-R	10	10.0	1.13	1.28	0.1820
LD1-120-R	12	12.0	1.05	1.18	0.2100
LD1-150-R	15	15.0	0.99	1.05	0.2350
LD1-180-R	18	18.0	0.83	0.98	0.3380
LD1-220-R	22	22.0	0.78	0.89	0.3780
LD1-270-R	27	27.0	0.67	0.87	0.5220
LD1-330-R	33	33.0	0.66	0.75	0.5400
LD1-390-R	39	39.0	0.63	0.68	0.5870
LD1-470-R	47	47.0	0.52	0.61	0.8440
LD1-560-R	56	56.0	0.50	0.57	0.9370
LD1-680-R	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

Ihr Vertriebspartner:
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POWER COMPONENTS

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URL: www.hy-line.ch

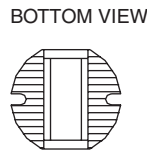
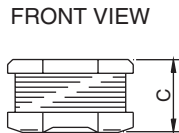
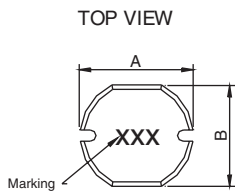
Part Number	Rated Inductance (μH)	OCL (1) Nominal	I _{rms} (2) Amperes	I _{sat} (3) Amperes	DCR (4) (Ω) (Max.)
LD2-100-R	10	10.0	3.83	3.45	0.0700
LD2-120-R	12	12.0	3.57	3.20	0.0800
LD2-150-R	15	15.0	3.38	2.85	0.0900
LD2-180-R	18	18.0	3.19	2.60	0.1000
LD2-220-R	22	22.0	3.13	2.45	0.1100
LD2-270-R	27	27.0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

Notes:

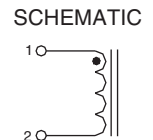
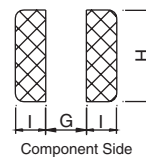
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- 2) RMS current for for an approximate T of 40°C. It is recommended that the temperature of the part not exceed 125°C

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- 4) DCR limits @ 20°C

Mechanical Diagrams



RECOMMENDED PCB LAYOUT



Marking:

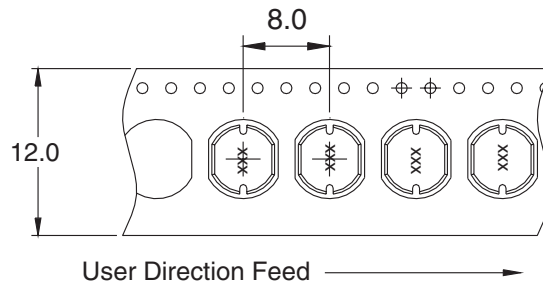
LD1: xxx=inductance value per family chart
 LD2: "C" logo
 xxx=inductance value

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.

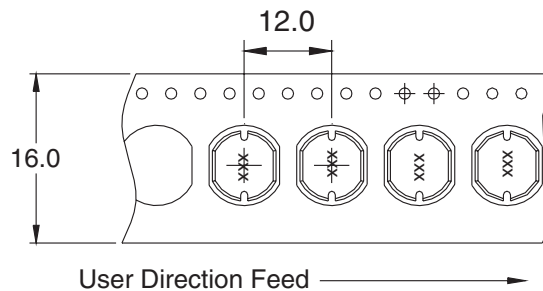
Packaging Information

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.

Inductance Characteristics

