

LC Series • Miniature Low Cost Toroidal Inductors

LC Series surface mount toroidal inductors are designed for use in applications where energy storage is required for maintenance of a highly stable inductance when a rapid change in load current occurs. These inductors are excellent for filtering high frequency signals while supporting a substantial DC current as well as for AC ripple, switch mode power supplies and for use with DC-DC Converters.

Features

- · Operating frequency to 1 MHz
- · High energy storage with minimum saturation
- · High stability from no load to full load
- · Pick and place compatible
- Designed as 1:1 Coupled Inductor (Series or Parallel) or as 1:1 Isolation Transformer
- Manufactured in an ISO-9001:2000, TS-16949:2002 and ISO-14001:2004 certified Talema facility
- Meets lead free reflow level J-STD-020C
- Fully RoHS compliant



Test Yeltage between windings: 500\rms

Test Voltage between windings: 500Vrms Operating Temperature: -40°C to +125°C Climatic category: IEC68-1 40/125/56



Applications

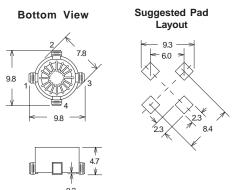
DC-DC Converters • Common Mode Filter • Computer Note Books Pulse Modulation Switching Regulators: Step-up, Step-down, Inverting or dual output • Filtering Battery Powered Equipment

| Part Number | Parallel Connected | | | Series Connected | | | _ |
|--------------|--|--|-------------|--|--|-------------|--|
| | Full Load Current (A _{DC}) | L _O (μΗ) ±15% No Load | DCR mOhm | Full Load Current (A _{DC}) | L _O (μΗ) ±15% No Load | DCR mOhm | Energy Storage (µJ) ² |
| LC1-3.00-2.2 | 3.00 | 2.2 | 9 | 1.50 | 8.8 | 36 | 7.0 |
| LC1-2.10-4.7 | 2.10 | 4.7 | 16 | 1.05 | 18.8 | 64 | 7.2 |
| LC1-1.40-10 | 1.40 | 10 | 37 | 0.70 | 40 | 148 | 7.2 |
| LC1 1.10-15 | 1.10 | 15 | 58 | 0.55 | 60 | 232 | 7.0 |
| LC1-0.92-22 | 0.92 | 22 | 86 | 0.46 | 88 | 344 | 7.1 |
| LC1-0.76-33 | 0.76 | 33 | 133 | 0.38 | 132 | 532 | 7.2 |
| LC1-0.64-47 | 0.64 | 47 | 205 | 0.32 | 188 | 820 | 7.1 |
| LC1-0.54-68 | 0.54 | 68 | 307 | 0.27 | 272 | 1228 | 7.2 |
| LC1-0.44-100 | 0.44 | 100 | 376 | 0.22 | 400 | 1504 | 7.2 |
| LC1-0.36-150 | 0.36 | 150 | 719 | 0.18 | 600 | 2876 | 7.2 |
| LC1-0.30-220 | 0.30 | 220 | 866 | 0.15 | 880 | 3464 | 7.3 |

Talema's engineering staff can assist in the design of other inductance values and sizes.

Note: The µJoule rating (½Ll²) is the ability of the inductor to store energy.

Dimensions



Dimensions: Inches (Millimeters)

Tolerance: ±0.010 (0.25) unless specified otherwise

