Datasheet



LC Common Mode Power Filter - LPF-01

This is a compact and effective LC filter designed to clean a noisy DC power supply. Perfect for sensitive components in a noisy system. The filter has properties to reduce the effects of interference radiated through the air and noise conducted via the power wires. One advantage of this filter is that both the negative and positive leads are filtered (common mode).

Schematic equivalent



Specifications

- · Revision: Rev3 March 2013
- · Type: passive common-mode low-pass power ripple filter
- · Modes: common mode, differential mode jumper selectable
- · Maximum voltage: 16V DC
- Maximum current: ~1.5A
- · Cutoff frequency at -3dB: 127 Hz (attenuates higher frequencies/noise)
- · Voltage drop over filter: 180mV at 900mA
- · Maximum voltage ripple: 120mV
- · Capacitor: Japanese Aluminum Polymer 105°C Capacitor
- · Impedance/ESR: 0.012 Ohm at 100kHz/16V
- · Ripple current: 5000mA rms
- · Choke: German Common-mode Choke
- · Series resistance (DC): 0.205 Ohm/path
- · Wire / trace thickness: twisted 22 AWG / 32 mils
- · Operating temperature: -40 °C to +105 °C
- · Dimensions: 37.7 L x 8.8 W x 14.5 H mm
- ·Weight: 8.1 grams (inc. JST connectors)
- · RoHS compliant
- · Designed and made in Europe