

# Power Choke – L0451-AL

For ON Semiconductor  
MC33163 & MC34163



The L0451-AL is specified by ON Semiconductor for use with their MC33163 and MC34163 power switching regulators. This choke features a 10% inductance tolerance and 100 Vrms isolation from winding to core.

Request free evaluation samples by contacting Coilcraft or visiting [www.coilcraft.com](http://www.coilcraft.com).

**Core material** Ferrite

**Terminations** RoHS tin-silver over copper

**Weight** 49 g

**Ambient temperature** –40°C to +85°C

**Storage temperature** Component: –40°C to +85°C.

Tray packaging: –40°C to +80°C

**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at <30°C / 85% relative humidity)

**Failures in Time (FIT) / Mean Time Between Failures (MTBF)**

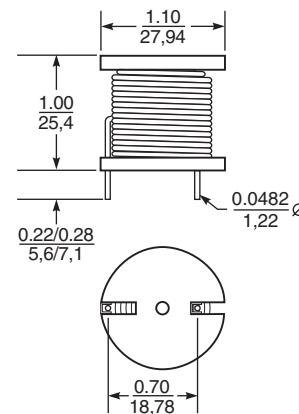
38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

**Packaging** 49 parts per tray

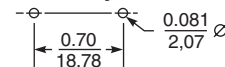
**PCB washing** Tested with pure water or alcohol only. For other solvents, see Doc787\_PCB\_Washing.pdf

Part number	Inductance ±10% <sup>1</sup> (µH)	DCR max (Ohms)	SRF typ <sup>2</sup> (MHz)	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)
L0451-AL	180	0.052	3.2	14	7

- Inductance measured at 1 kHz, 0.1 Vrms, 0 Adc using an Agilent/HP 4192A impedance analyzer.
  - SRF measured on an Agilent/HP 8753D network analyzer.
  - DC current at which the inductance drops 10% (typ) from its value without current.
  - Current that causes a 40°C rise from 25°C ambient.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



### Recommended Board Layout



Dimensions are in  $\frac{\text{inches}}{\text{mm}}$