I03 Series

THT High Current Power Inductors





Side View

- Height: 13.5 mm (Max)
- Footprint: 13.5 mm (Max) x 13.8 mm (Max)
- High Saturation Current to 50A
- \circ DCR as Low as 1.03 m Ω
- High Energy Storage in Compact Package
- Lower DCR than Similar Toroid Design

APPLICATIONS

Desktop CPUs Servers VRMs DC/DC Converters

PACKAGING

Pieces/Tray: 108 Trays/Box: 12 Pieces/Box: 1296

All dimensions are in mm

Mechanical Drawing Footprint Schematic X Ref. S F TOP VIEW

Electrical Specifications @ 25°C - Operating Temperature Range 1: -40°C to +155°C					
Part Number	Inductance, L _s ² (µH, +/- 10%)	DCR (mΩ, Max)	I_{SAT}³ (A _{DC})	I _{DC} ⁴ (A _{DC})	Dimensions (X, Y)(mm)
I03-142-1	1.4	1.03	50	35	6.60, 1.65
103-302-1	3.0	2.73	30	21	9.45, 1.30
103-562-1	5.6	7.66	14	9	7.11, 0.91

Side View

- **1. Operating Temp. Range:** The combination of ambient temperature and temperature rise.
- 2. Inductance: Tested at 100kHz, $0.1 V_{RMS}$, $0A_{DC}$ Bias
- 3. I_{SAT}: DC Current through the winding to cause a **30**% (typ) drop in inductance.
- I_{DC}: DC Current through the winding to cause 50°C temperature rise at 25°C ambient.
- 5. Flammability Standard: Meets UL 94V-0.
- 6. Insulation System Requirements: Meets Class F (155°C).

