I03 Series

THT High Current Power Inductors





- 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

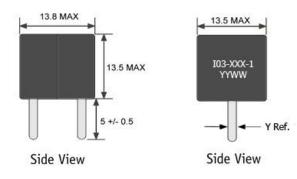
APPLICATIONS

Desktop CPUs Servers VRMs DC/DC Converters

PACKAGING

Pieces/Tray: 120 Trays/Box: 10 Pieces/Box: 1200

Mechanical Drawing Footprint Schematic







All dimensions are in mm

| 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) |
| 103-142-1 | 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 |

- **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).

