



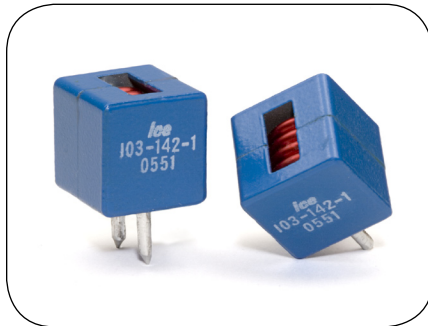
ICE Components, Inc.

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High Current Power Inductor

I03 Series



Features

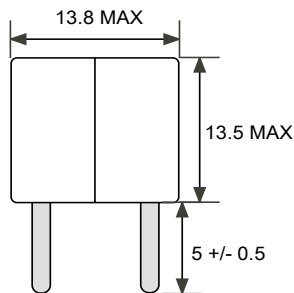
- High Saturation Current to 50A
- DCR as low as 0.98mΩ
- High Energy Storage in a Compact Package
- Lower DCR than similar Toroid Design

Applications

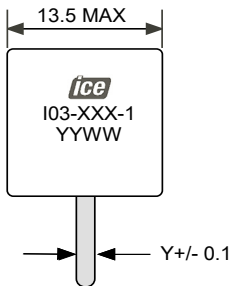
- Desktop CPUs
- Servers
- VRMs
- DC/DC Converters

Packaging: Tray =108 pieces, Box = 12 trays, Box = 1296 pieces

Mechanical

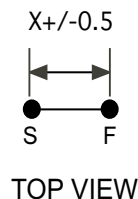


Side View

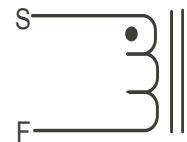


Side View

Suggested PCB layout



Schematic



unit: mm

Electrical Specifications

Part Number	Inductance ¹ (μH, +/-10%)	DCR (mΩ)		Isat ⁵ (A)	Idc ⁶ (A)	Dimensions (mm)	
		Typ.	Max.			X	Y
I03-142-1	1.4	0.98	1.03	50	35	6.60	1.65
I03-302-1	3.0	2.60	2.73	30	21	9.45	1.30
I03-562-1	5.6	7.00	7.66	14	9	7.11	0.91

1. Tested at 100 kHz, 0.1Vrms, 0 A_{dc} bias.
2. Electrical specifications at 25°C.
3. Operating range: -40°C to +155°C. This is a combination of ambient plus temperature rise.
4. Meets Class F (155°C) insulation system requirements.
5. I_{sat} is the DC current required to reduce the nominal inductance by 30%.
6. I_{dc} is the DC current required to produce a temperature rise of 50°C.
7. Meets UL 94V-0.

