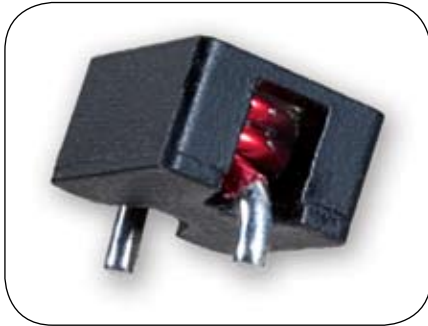


I02 Series High Current Power Inductor



Features

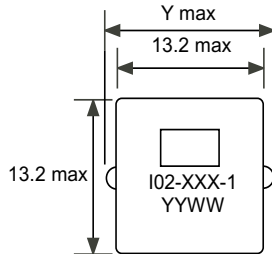
- High Saturation Current to 60A
- DCR as low as 0.60mΩ
- High Energy Storage in a Compact Package
- Lower DCR than similar Toroid Design

Applications

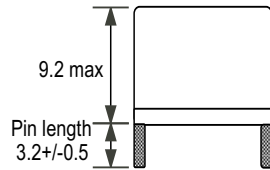
- Desktop CPUs
- Servers
- VRMs
- DC/DC Converters

Packaging Tray =130 pieces, Box = 16 trays, Box = 2080 pieces

Mechanical

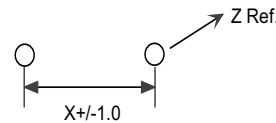


Top View



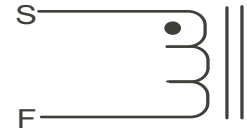
Side View

Suggested PCB layout



Top View

Schematic



unit: mm

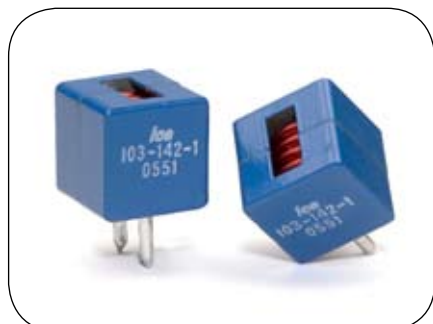
Electrical Specifications

Part Number	Inductance ¹ (uH, +/-10%)	DCR (mΩ)		I_{sat}^5 (A)	I_{dc}^6 (A)	Dimensions		
		Typ.	Max.			X	Y	Z
I02-221-1	0.22	0.45	0.60	60+	45	12.5	16.0	2.2
I02-351-1	0.35	0.45	0.60	55	45	12.5	16.0	2.2
I02-451-1	0.45	1.10	1.45	50	29	12.7	15.7	1.6
I02-601-1	0.60	1.10	1.45	45	29	12.7	15.7	1.6
I02-801-1	0.80	2.10	2.40	44	23	10.0	13.0	1.3
I02-102-1	1.0	2.10	2.40	35	23	10.0	13.0	1.3
I02-132-1	1.3	2.55	3.00	34	19	11.0	14.0	1.3
I02-152-1	1.5	2.55	3.00	25	19	11.0	14.0	1.3
I02-182-1	1.8	2.55	3.00	20	19	11.0	14.0	1.3

1. Tested at 100 kHz, 0.1Vrms, 0 Adc bias.
2. Electrical specifications at 25°C.
3. Operating range: -40°C to +125°C.
4. Meets UL 94V-0.
5. Idc is DC current required to produce a temperature rise of 40°C.
6. Isat is the DC current required to reduce the nominal inductance by 15%.
7. RoHS compliant parts.



I03 Series High Current Power Inductor



Features

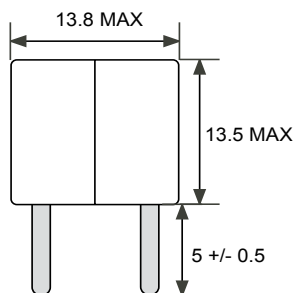
- High Saturation Current to 50A
- DCR as low as 0.98mΩ
- High Energy Storage in a Compact Package
- Lower DCR than similar Toroid Design

Applications

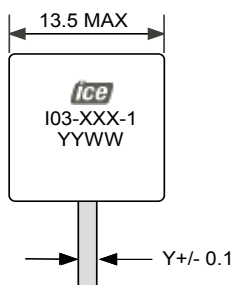
- Desktop CPUs
- Servers
- VRMs
- DC/DC Converters

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

Mechanical

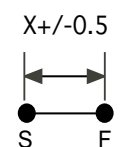


Side View



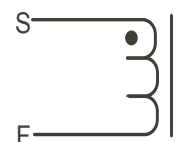
Side View

Suggested PCB layout



TOP VIEW

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.

