●FEATURE

1. High current capacity and Low DCR(used ceramic base)
2. High heat resistance, ideal for reflow soldering
3. Open magnetic circuit construction



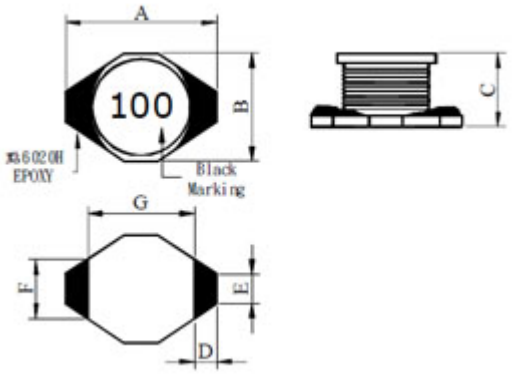
●APPLICATION

1. DC-DC converter, PDA and Cellular Phone
2. Set top box, Notebook and Server

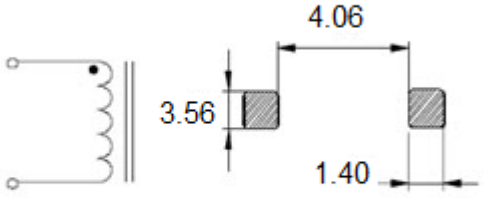
●ORDERING INFORMATION

PIO1608	-1R0	T
PN	Inductance	M:±20%

●SHAPE AND DIMENSION



●SCHEMATICS AND LAND PATTERNS(mm)



●SPECIFICATION

Dimension in mm

TYPE	A (MAX)	B(MAX)	C(MAX)	D(REF)	E(REF)	F(REF)	G(REF)
PIO1608	6.6	4.45	2.92	1.02	1.27	3.05	4.32

●ELECTRICAL CHARACTERISTICS

PART NUMBER	L (μH)	SRF (MHz) typ	RDC (Ω)Max	Isat (A)	Irms (A)
PIO1608-1R0M	1.0±20%	130	0.05	2.9	2.9
PIO1608-1R5M	1.5±20%	115	0.06	2.6	2.8
PIO1608-2R2M	2.2±20%	100	0.07	2.3	2.4
PIO1608-2R7M	2.7±20%	75	0.08	2.1	2.1
PIO1608-3R3M	3.3±20%	70	0.08	2.0	2.0
PIO1608-4R7M	4.7±20%	50	0.09	1.5	1.5
PIO1608-6R8M	6.8±20%	45	0.13	1.2	1.4
PIO1608-8R2M	8.2±20%	40	0.16	1.15	1.3
PIO1608-100M	10±20%	35	0.16	1.1	1.2
PIO1608-150M	15±20%	30	0.23	0.9	1.1
PIO1608-220M	22±20%	20	0.37	0.70	0.80
PIO1608-330M	33±20%	15	0.51	0.58	0.60
PIO1608-470M	47±20%	14	0.64	0.50	0.50
PIO1608-680M	68±20%	11	0.86	0.40	0.40
PIO1608-101M	100±20%	9	1.27	0.31	0.30
PIO1608-151M	150±20%	6	2.00	0.27	0.25
PIO1608-221M	220±20%	5.5	3.11	0.22	0.20
PIO1608-331M	330±20%	5	3.80	0.18	0.16
PIO1608-471M	470±20%	4	5.06	0.16	0.15
PIO1608-681M	680±20%	3	9.20	0.14	0.12
PIO1608-102M	1000±20%	2	13.8	0.10	0.07

Note1. Measurement frequency of Inductance value : at 100kHz, 0.1V

Note2. Measurement ambient temperature of L, DCR and IDC: at 25°C

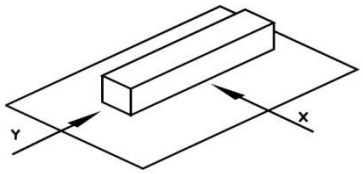
Note3. Isat: DC current at which the inductance drops 10%(typ) from its value without current

Note4. Irms: Average current for 40°C temperature rise from 25°C ambient

Note5. Inductance tolerance: M: ±20%

●GENERAL CHARACTERISTICS

1. Operating temperature range: -40 TO + 85°C (Includes temperature when the coil is heated)
2. External appearance: On visual inspection, the coil has external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Y withstanding at below conditions. Terminal should not peel off. (refer to figure at right) 0.5kg



4. Insulating resistance: Over 100MΩ at 100V D.C. between coil and core.
5. Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
6. Temperature characteristics: Inductance coefficient (0~2,000)x10-6/°C (-25~+80°C).
7. Humidity characteristics(Moisture Resistance): Inductance deviation within ±5%, after 96 hours in 90~95% relative humidity at 40 ±2°C and 1 hour drying under normal condition.
8. Vibration resistance: Inductance deviation within ±5%, after vibration for 1 hour. In each of three orientations at sweep vibration (10~55~10 Hz) with 1.5mm P-P amplitudes.
9. Shock resistance: Inductance deviation within ±5%, after being dropped once with 981m/s2 (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.
10. Resistance to Soldering Heat: 260°C, 10 seconds.
11. Storage environment

    Storage condition:

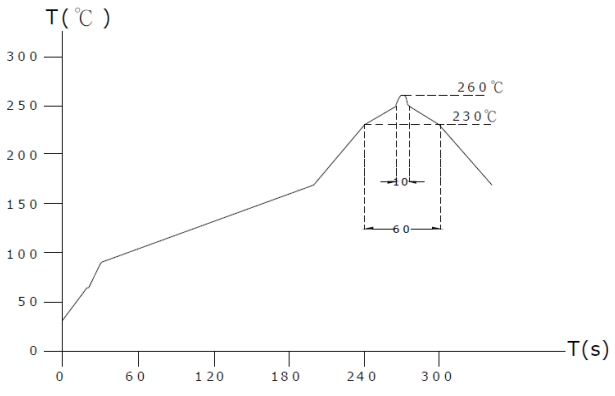
    Temperature Range: 10°C ~ 35°C (Generally: 21°C ~ 31°C)

    Humidity Range: 50% ~ 80% RH (Generally: 65% ~ 75%)

    Transportation condition:

    Temperature Range: -35°C ~ 85°C, Humidity Range: 50% ~ 95% RH
12. Use components within 6 months. If 6 months or more have elapsed, check soldarability before use.
13. Reflow profile recommend:

Lead - free heat endurance test



Lead-free the recommended reflow condition

