SMT Power Inductor

SIG4012 Type

Features

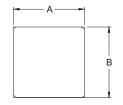
- RoHS compliant.
- Halogen free compliant.
- Low profile (1.2mm max. height), SMD type.
- Shielded
- Self-leads, suitable for high density mounting.
- High energy storage and low DCR.
- Provided with embossed carrier tape packing.

 Ideal for power source circuits, DC-DC converter, DC-AC inverters inductor applications.
- In addition to the standard versions shown here, customized inductors are available to meet your exact requirements.

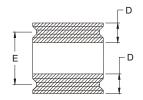


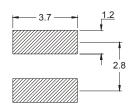
Mechanical Dimension:











UNIT: mm/inch A = 3.9 ± 0.2 / 0.154 ± 0.008 $B = 3.9 \pm 0.2 / 0.154 \pm 0.008$ C = 1.2/0.047 Max. D = 1.2±0.2 / 0.047±0.008 E = 2.5±0.2 / 0.098±0.008

Electrical Characteristics: 25°C: 1MHz, 1.0V

PART NO.	L ¹ (uH)	DCR $(m\Omega)$ Max.	Isat ² (Adc)	lr ³ (Adc)
SIG4012 - 1R0	1.0	60	2.80	3.10
SIG4012 - 1R5	1.5	70	2.40	2.80
SIG4012 - 2R2	2.2	80	1.90	2.60
SIG4012 - 3R3	3.3	102	1.60	2.30
SIG4012 - 4R7	4.7	126	1.40	1.80
SIG4012 - 6R8	6.8	156	1.20	1.70
SIG4012 - 8R2	8.2	190	1.10	1.40
SIG4012 - 100	10.0	240	1.00	1.30
SIG4012 - 220	22.0	492	0.70	0.95
SIG4012 - 330	33.0	780	0.53	0.60
SIG4012 - 470	47.0	1020	0.46	0.50

- 1. Tolerance of inductance: $\pm 20\%$ for 1.0~47.0uH.
- 2. Isat is the DC current which cause the inductance drop 30% typical of its nominal inductance without current.
- 3. Ir is the DC current which cause the surface temperature of the part increase less than 40°C.
- 4. Rated current: Value obtained when current flows and the temperature has risen to 40°C or when DC current flows and the nominal value of inductance has fallen by 30%, whichever is smaller.
- 5. Operating temperature: -40°C to 125°C (including self-temperature rise).

