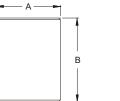
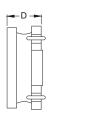
# <u>SMT Power Inductor</u> **SIG252012** Type

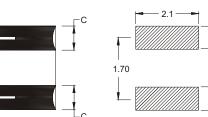
### **Features**

- 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.

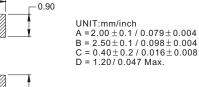
### **Mechanical Dimension:**







RECOMMENDED PAD



0.90

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

PART NO.	L <sup>1</sup>	DCR (m $\Omega$ )		lsat <sup>2</sup>	lr <sup>3</sup>
	(uH)	Typical	Max.	(Adc) TYP.	(Adc)
SIG252012 - R47	0.47	47	56	3.70	2.20
SIG252012 - 1R0	1.00	73	88	2.70	1.80
SIG252012 - 1R5	1.50	105	126	2.20	1.50
SIG252012 - 2R2	2.20	129	155	2.00	1.30
SIG252012 - 3R3	3.30	227	272	1.60	1.00
SIG252012 - 4R7	4.70	338	406	1.30	0.81
SIG252012 - 5R6	5.60	375	450	1.15	0.72
SIG252012 - 6R8	6.80	510	612	1.10	0.66
SIG252012 - 100	10.00	630	756	0.90	0.59

\* : If you require another part number please contact with us.

\*\* : All test data is referenced to 25°C ambient.

Note1. : Inductance tolerance  $\pm 20\%$ .

- Note2.: Isat : DC current (A) that will cause Lo to drop approximately 30%.
- Note3.: Idc : DC current (A) that will cause an approximate  $\triangle T$  of 40°C.
- Note4.: Operating temperature range -55°C to +125°C.
- Note5.: The part temperature (ambient + temp rise ) should not exceed 125°C under worse case operating. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- Note6. : The rated current as listed is either the saturation current or the heating current depending on Which value is lower.



