



SPECIFICATION FOR APPROVAL

SIG3012-XXX Sealed Choke Coil

1. Features

Low profile : 2.9mm x 2.9mm x 1.2mm

Low coil resistance with large currents.

High magnetic shield construction should actualize high resolution for EMC protection.

100% lead (Pb) free meet RoHS standard

2. Application

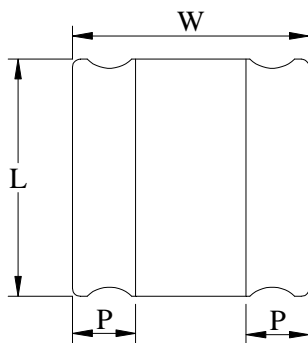
Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc..

3. Type Designation

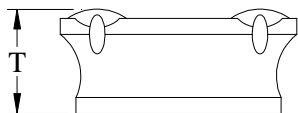
SIG	3012	—	XXX
(1)	(2)		(3)

Where (1) Series No :
 (2) Size :
 3012 = 2.9mm x 2.9mm x 1.2mm
 (3) Inductance Value :
 3R3 = 3.3μH

4. Outline Dimensions



Code	Dimensions (mm)
L	2.9 ± 0.2
W	2.9 ± 0.2
T	1.2 Max.
P	0.75 ± 0.2

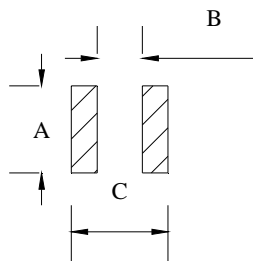


Note: This graph is only regard to dimensions spec. For outer appearance, please refer to actual product.

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5. Recommend Land Pattern Dimensions

The customer shall determine the land dimensions shown above after confirming and safety.



A	2.7 ~ 2.9
B	1.2 ~ 1.4
C	3.0

Unit : mm

6. Specifications

Part Number	L0 Inductance (μH) @ (0A)	R_{dc} (m Ω)		Heat Rating Current DC Amps. Idc (A)		Saturation Current DC Amps. Isat (A)	
		Typical	Maximum	Typical	Maximum	Typical	Maximum
SIG3012-R50	0.5	35	42	2.80	2.52	2.80	2.52
SIG3012-1R0	1.0	43	52	2.60	2.34	2.50	2.25
SIG3012-1R5	1.5	65	78	2.00	1.80	1.90	1.71
SIG3012-2R2	2.2	82	98	1.90	1.71	1.70	1.53
SIG3012-3R3	3.3	100	120	1.70	1.53	1.50	1.35
SIG3012-4R7	4.7	130	156	1.40	1.26	1.20	1.08
SIG3012-6R8	6.8	190	228	1.20	1.08	1.00	0.90
SIG3012-100	10.0	280	336	1.00	0.90	0.80	0.72
SIG3012-220	22.0	630	756	0.67	0.60	0.55	0.49
SIG3012-330	33.0	910	1,092	0.55	0.50	0.46	0.41
SIG3012-470	47.0	1,250	1,500	0.45	0.41	0.35	0.32

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

** : Inductance Tolerance $\pm 20\%$

Note 1. : All test data is referenced to 25°C ambient.

Note 2. : Idc : DC current (A) that will cause an approximate ΔT of 40°C

Note 3. : Isat : DC current (A) that will cause Lo to drop approximately 30%

Note 4. : Operating Temperature Range -55°C to + 125°C

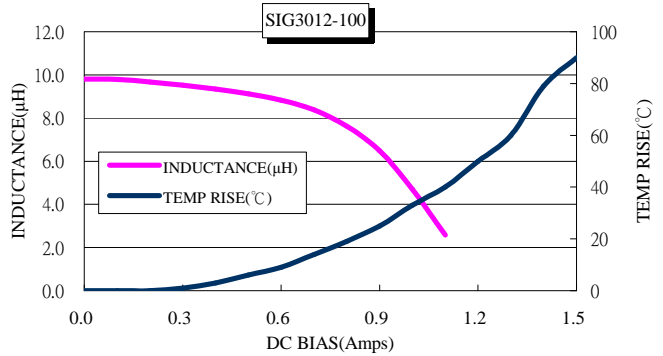
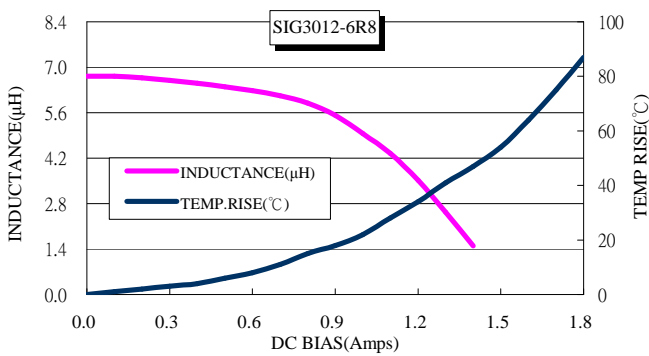
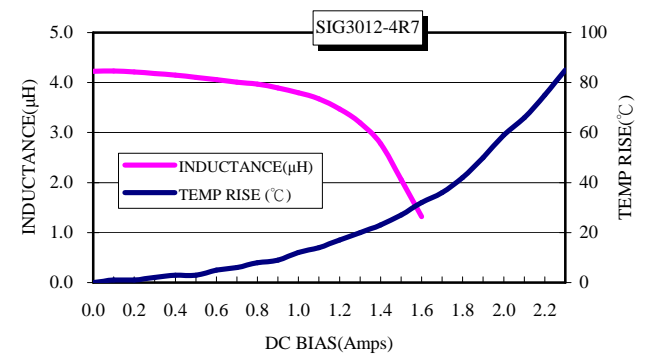
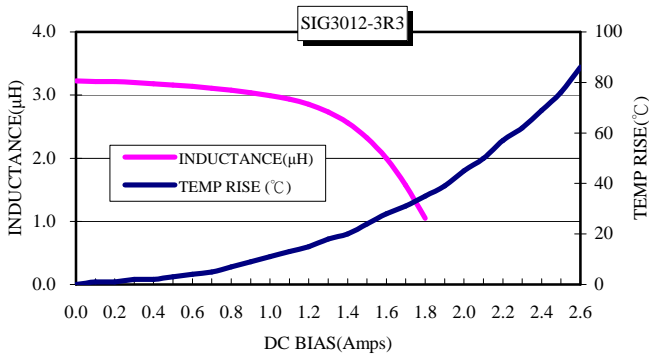
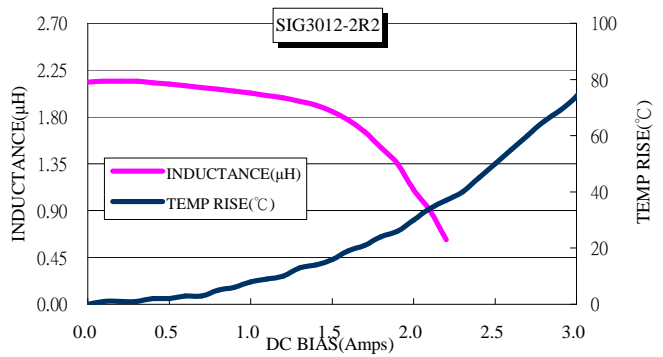
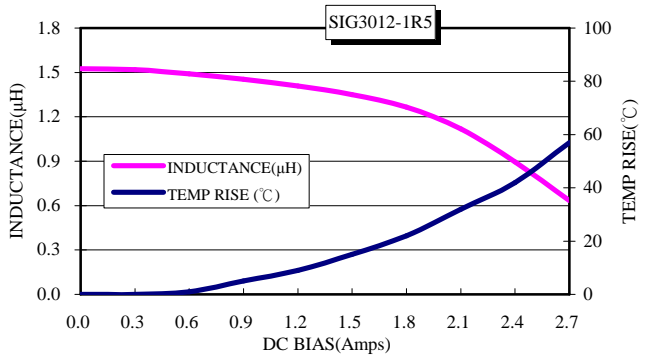
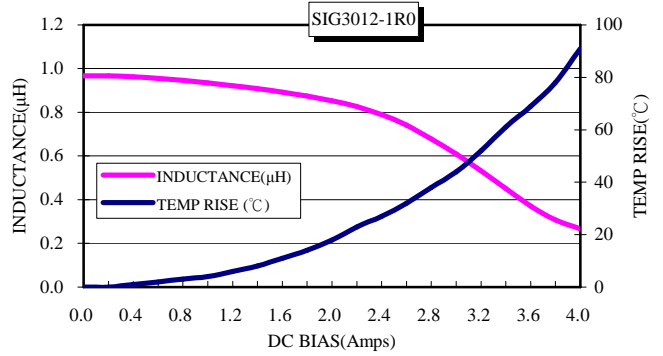
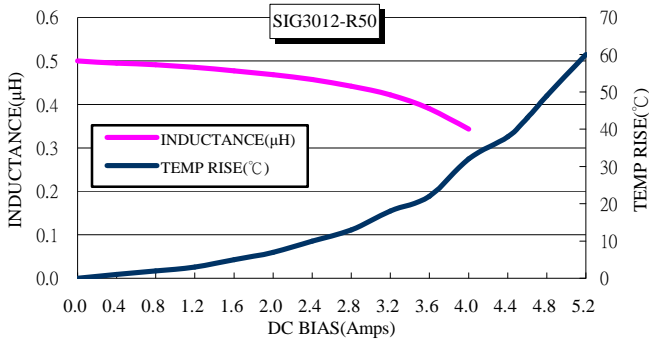
Note 5. : The part temperature (ambient + temp rise) should not exceed 125°C under worse case operating conditions. Circuit design , component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.

Note 6. : The rated current as listed is either the saturation current or the heating current depending on which value is lower.



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6-1 Current Characteristic





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