SPECIFICATION FOR APPROVAL

SIG0412-XXX Sealed Choke Coil

1. Features

Low profile：3.9mm x 3.9mm 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

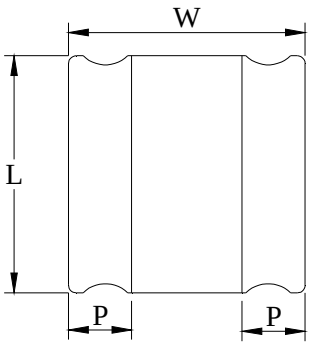
Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc..

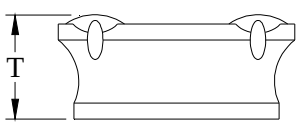
3. Type Designation

SIG	4012	–	XXX
(1)	(2)		(3)

Where (1) Series No :
(2) Size :
4012 = 3.8mm x 3.8mm x 1.2mm
(3) Inductance Value :
3R3 = 3.3μH

4. Outline Dimensions





Code	Dimensions (mm)
L	3.8 ± 0.2
W	3.8 ± 0.2
T	1.2 Max
P	1.0 ± 0.2

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

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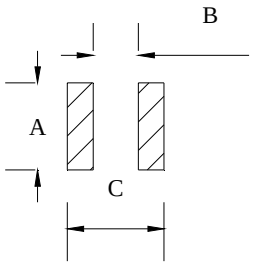
5. Recommend Land Pattern Dimensions

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



A	3.7
B	1.6
C	4.0

Unit : mm

6. Specifications

Part Number	L0 Inductance (μH) @ (0A)	R_{dc} (mΩ)		Heat Rating Current DC Amps. Idc (A)		Saturation Current DC Amps. Isat (A)	
		Typical	Maximum	Typical	Maximum	Typical	Maximum
SIG4012-1R0	1.0	50	60	3.10	2.79	2.80	2.52
SIG4012-1R5	1.5	60	70	2.80	2.52	2.40	2.16
SIG4012-2R2	2.2	70	84	2.60	2.34	1.90	1.71
SIG4012-3R3	3.3	85	102	2.30	2.07	1.60	1.44
SIG4012-4R7	4.7	110	132	1.80	1.62	1.40	1.26
SIG4012-6R8	6.8	130	156	1.70	1.53	1.20	1.08
SIG4012-8R2	8.2	165	190	1.40	1.26	1.10	0.99
SIG4012-100	10.0	200	240	1.30	1.17	1.00	0.90
SIG4012-220	22.0	410	492	0.95	0.855	0.70	0.63
SIG4012-330	33.0	650	780	0.60	0.54	0.53	0.48
SIG4012-470	47.0	850	1,020	0.50	0.45	0.46	0.41

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

**：Inductance Tolerance ± 20%

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

Note 2.： Test Condition:1MHz, 1.0Vrms

Note 3.： Idc : DC current (A) that will cause an approximate △T of 40℃

Note 4.： Isat : DC current (A) that will cause Lo to drop approximately 30%

Note 5.： Operating Temperature Range -55℃ to + 125℃

Note 6.： The part temperature (ambient + temp rise) should not exceed 125℃ 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 7.： The rated current as listed is either the saturation current or the heating current depending on which value is lower.

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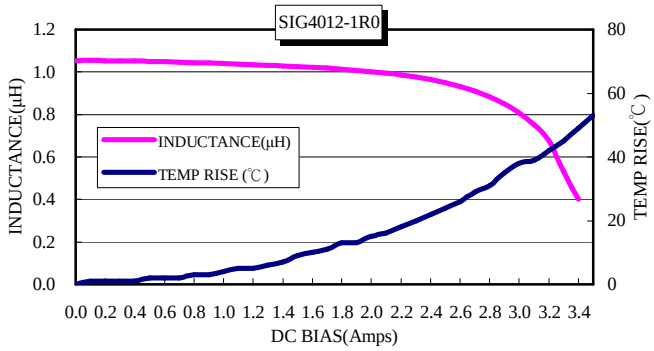
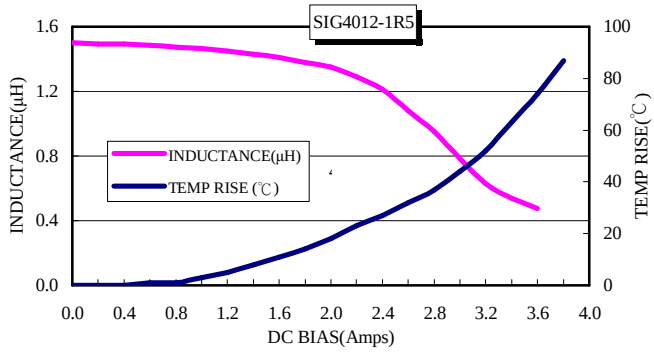
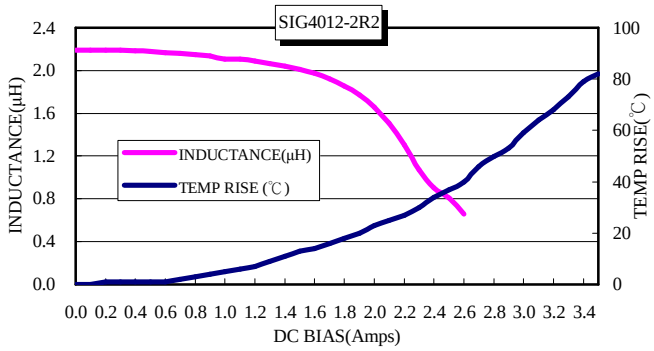
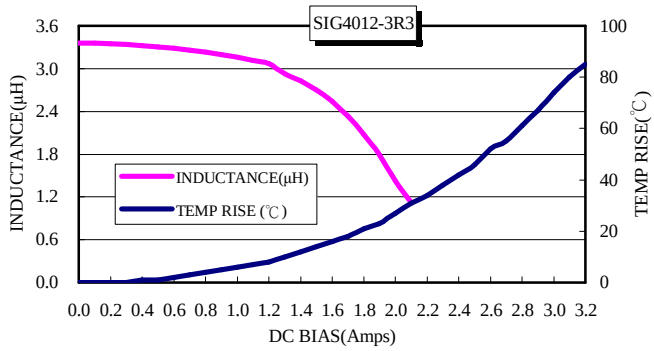
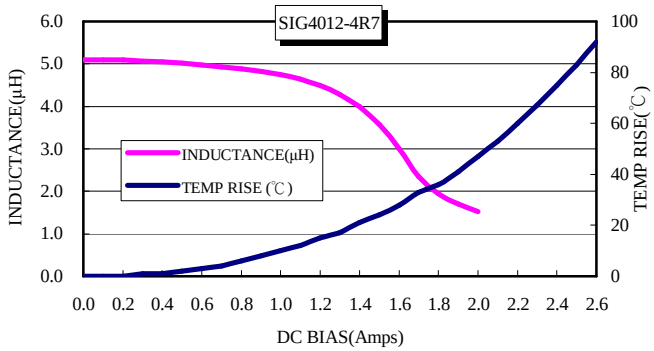
6-1 Current Characteristic

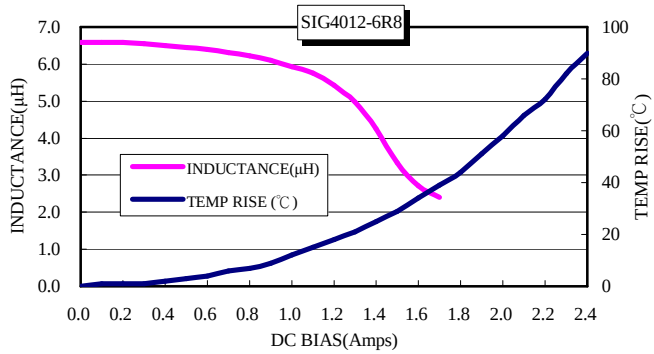


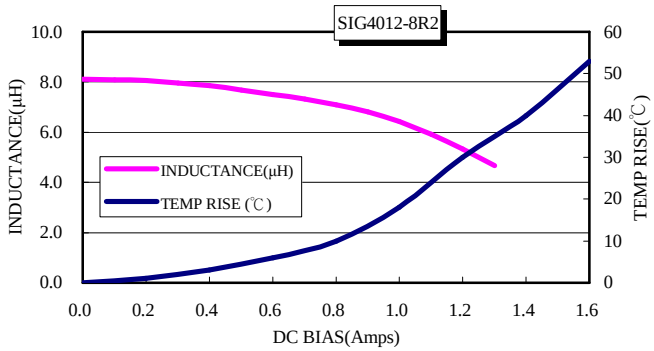


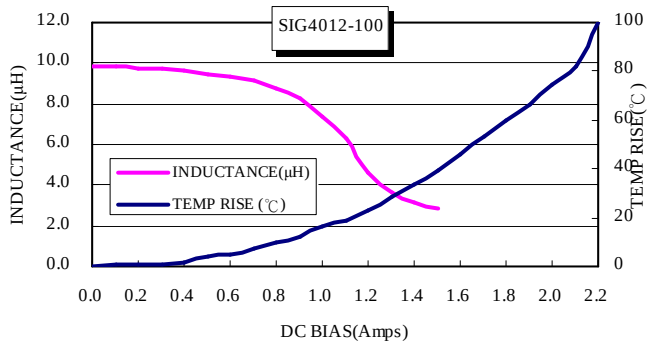












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