



# SPECIFICATION FOR APPROVAL

DOCUMENT : SIG3010H-000

REVISION : A2

PAGE : 1 OF 4

## Sealed Choke Coil SIG3010H type

### ■ Features

Low profile : 3.0mm x 3.0mm x 1.0mm

Low coil resistance with large currents.

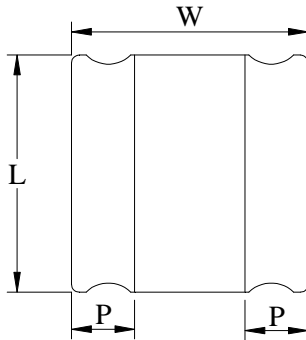
High magnetic shield construction should actualize high resolution for EMC protection.

100% lead (Pb) free meet RoHS standard

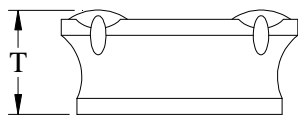
### ■ Application

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

### ■ Outline Dimensions



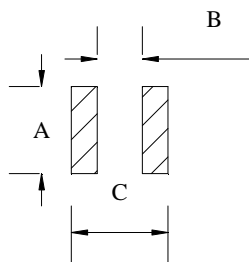
Code	Dimensions (mm)
L	3.0 ± 0.1
W	3.0 ± 0.1
T	1.0 Max
P	0.75 ± 0.2



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

### ■ 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

**SPECIFICATION FOR APPROVAL****■ Specifications**

Part Number	L0 Inductance ( $\mu$ H ) @ (0A)	R <sub>dc</sub> ( m $\Omega$ )		Heat Rating Current DC Amps. I <sub>dc</sub> ( A )		Saturation Current DC Amps. I <sub>sat</sub> ( A )	
		Typical	Maximum	Typical	Maximum	Typical	Maximum
SIG3010H-R47	0.47	38	46	3.20	2.88	3.70	3.33
SIG3010H-1R0	1.0	68	82	2.75	2.48	3.00	2.70
SIG3010H-1R5	1.5	65	78	1.90	1.71	1.80	1.62
SIG3010H-2R2	2.2	90	108	1.60	1.44	1.60	1.44
SIG3010H-3R3	3.3	110	132	1.45	1.31	1.25	1.13
SIG3010H-4R7	4.7	167	200	1.20	1.08	1.00	0.90
SIG3010H-6R8	6.8	250	300	0.95	0.86	0.85	0.76
SIG3010H-8R2	8.2	311	373	0.85	0.77	0.80	0.72
SIG3010H-100	10.0	366	439	0.81	0.73	0.75	0.68
SIG3010H-150	15.0	672	807	0.72	0.64	0.58	0.52
SIG3010H-220	22.0	708	850	0.55	0.50	0.45	0.41
SIG3010H-330	33.0	1,360	1,632	0.50	0.45	0.38	0.34
SIG3010H-470	47.0	2,170	2,604	0.38	0.34	0.30	0.27

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

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

Note 1. : All test data is referenced to 25 $^{\circ}$ C ambient.

Note 2. : Test Condition:1MHz, 1.0Vrms

Note 3. : I<sub>dc</sub> : DC current (A) that will cause an approximate  $\Delta$ T of 40 $^{\circ}$ C

Note 4. : I<sub>sat</sub> : DC current (A) that will cause L<sub>o</sub> to drop approximately 30%

Note 5. : Operating Temperature Range -55 $^{\circ}$ C to + 125 $^{\circ}$ C

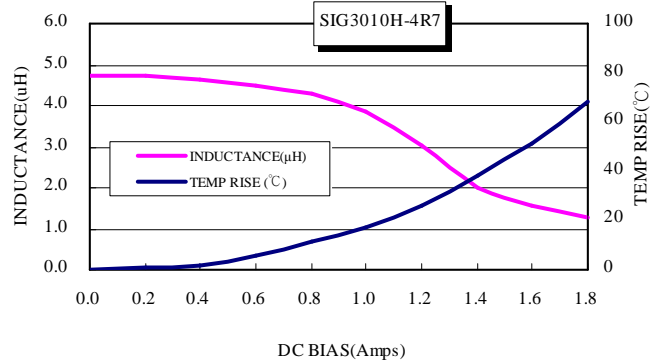
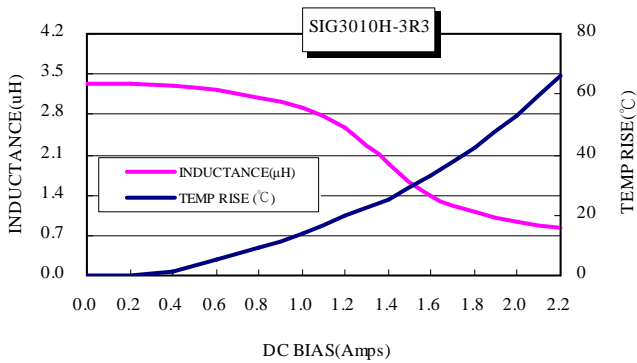
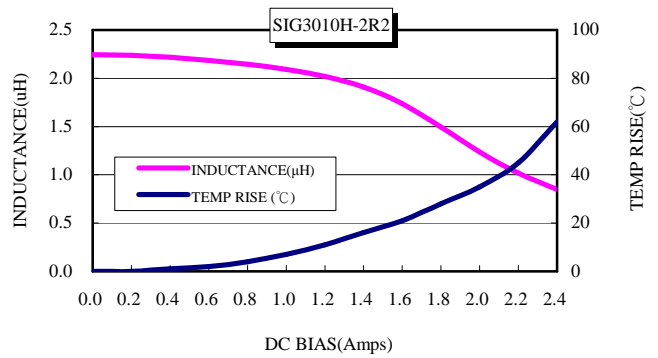
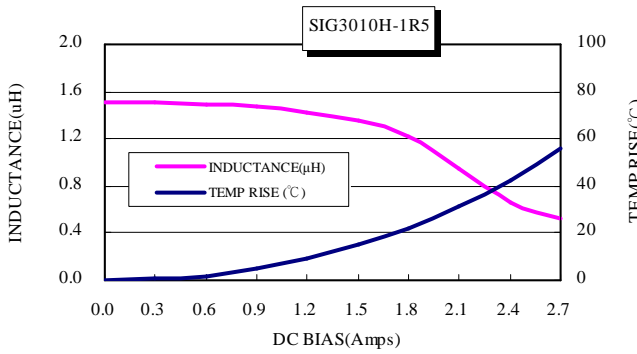
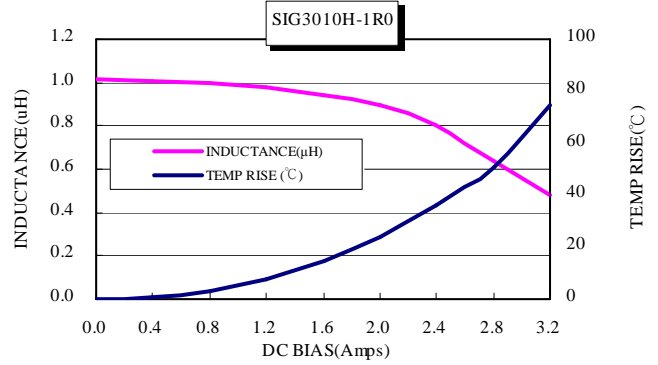
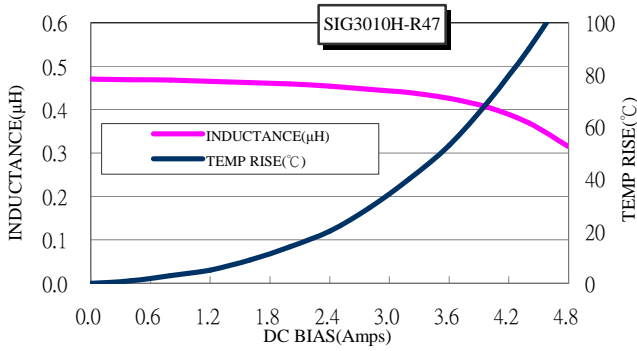
Note 6. : The part temperature (ambient + temp rise ) should not exceed 125 $^{\circ}$ C under worse case operating conditions. Circuit design , component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.

Note 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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## Current Characteristic





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