



SPECIFICATION FOR APPROVAL

SIG4018L-XXX Sealed Choke Coil

1. Features

Low profile : 3.8mm x 3.8mm x 1.8mm

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

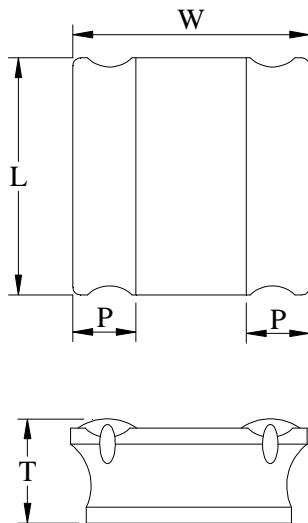
Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc..

3. Type Designation

SIG	4018	L	-	XXX
(1)	(2)	(3)		(4)

- Where
- (1) Series No :
 - (2) Size :
4018 = 3.8mm x 3.8mm x 1.8mm
 - (3) Model characteristic :
L: Low Resistance , H: High Current
 - (4) Inductance Value :
4R7 = 4.7μH

4. Outline Dimensions



Code	Dimensions (mm)
L	3.8 ± 0.2*
W	3.8 ± 0.2*
T	1.8 max. *
P	1.0 ± 0.2

* Dimensions are of the case not including the termination. For maximum overall dimensions including the termination, add 0.1mm.

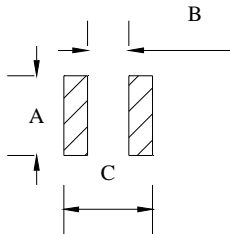
Note: This graph is only regard to dimensions spec. For outer appearance, please refer to actual product.



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5. Recommend Land Pattern Dimensions

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



A	3.8
B	1.8
C	3.8

Unit : mm

6. Specifications

Part Number	L0 Inductance (μH) @ (0A)	R_{dc} ($\text{m}\Omega$)		Heat Rating Current DC Amps. I_{dc} (A)		Saturation Current DC Amps. I_{sat} (A)	
		Typical	Maximum	Typical	Maximum	Typical	Maximum
SIG4018L-R56	0.56	17	22	5.4	4.86	5.5	4.95
SIG4018L-1R0	1.0	20	25	3.8	3.42	3.8	3.42
SIG4018L-1R2	1.2	25	30	3.6	3.24	3.6	3.24
SIG4018L-1R5	1.5	33	40	3.2	2.88	3.5	3.15
SIG4018L-1R8	1.8	34	41	3.1	2.79	3.1	2.79
SIG4018L-2R2	2.2	35	45	3.0	2.70	3.0	2.70
SIG4018L-3R3	3.3	45	56	2.7	2.43	2.4	2.16
SIG4018L-4R7	4.7	70	90	2.2	1.98	2.0	1.80
SIG4018L-6R8	6.8	90	115	1.9	1.71	1.7	1.53
SIG4018L-8R2	8.2	105	132	1.5	1.35	1.6	1.44
SIG4018L-100	10.0	135	170	1.4	1.26	1.55	1.40
SIG4018L-150	15.0	185	222	1.25	1.12	1.0	0.90
SIG4018L-220	22.0	250	315	1.2	1.08	0.83	0.74
SIG4018L-330	33.0	405	486	0.9	0.81	0.68	0.61
SIG4018L-470	47.0	495	594	0.8	0.72	0.56	0.50
SIG4018L-680	68.0	885	1,062	0.58	0.52	0.48	0.43
SIG4018L-101	100.0	1,545	1,854	0.42	0.37	0.45	0.40
SIG4018L-221	220.0	3,150	3,780	0.30	0.27	0.33	0.30
SIG4018L-331	330.0	4,200	5,040	0.27	0.24	0.25	0.22

* : 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. : I_{dc} : DC current (A) that will cause an approximate ΔT of 40°C

Note 3. : I_{sat} : DC current (A) that will cause L_0 to drop approximately 30%

Note 4. : Operating Temperature Range -55°C to $+125^{\circ}\text{C}$

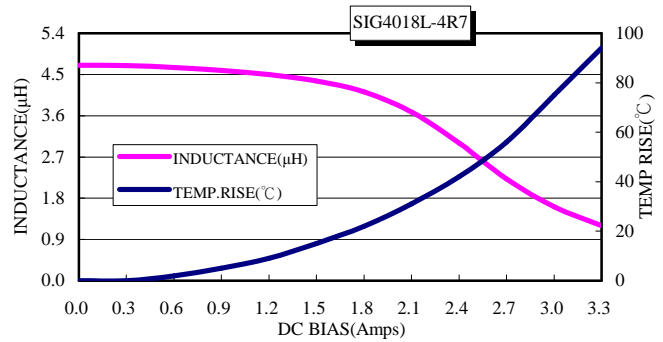
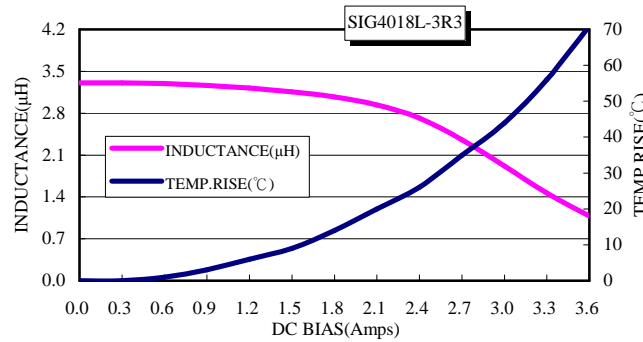
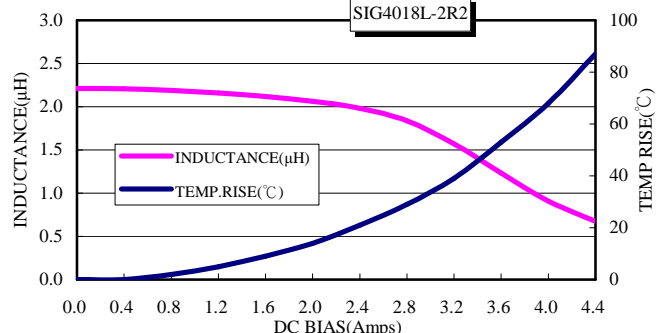
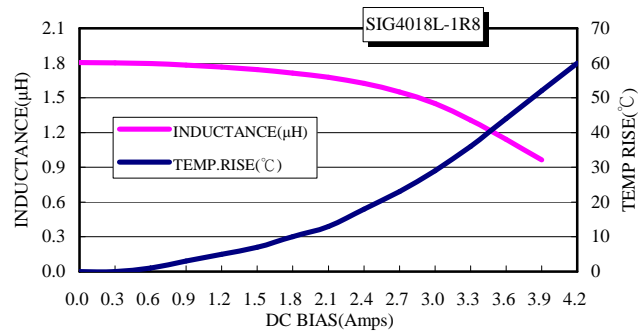
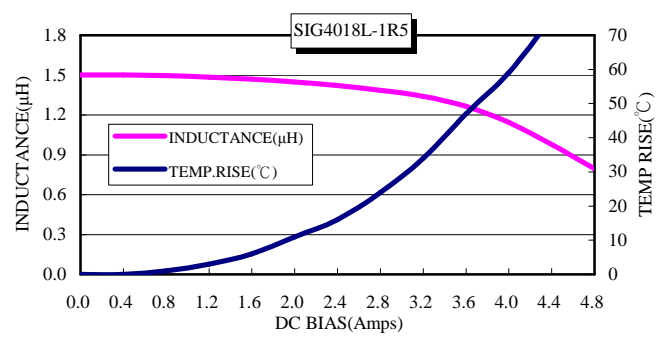
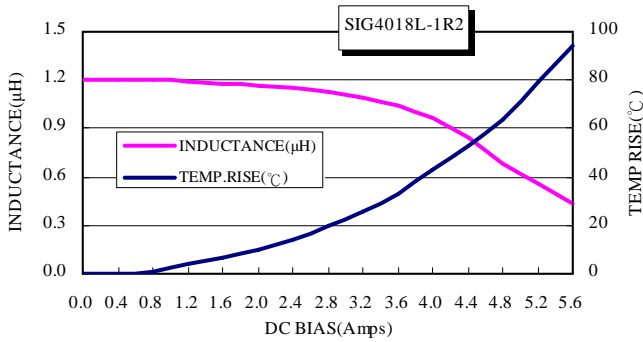
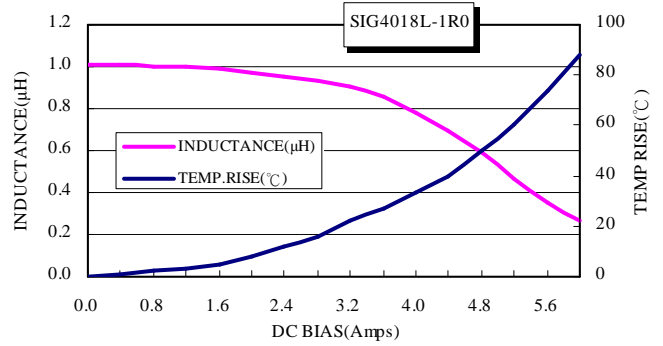
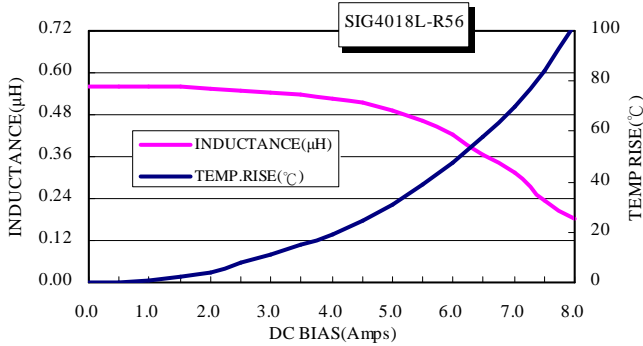
Note 5. : The part temperature (ambient + temp rise) should not exceed 125°C under worse case operating conditions. Circuit design , component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.

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 Current Characteristic



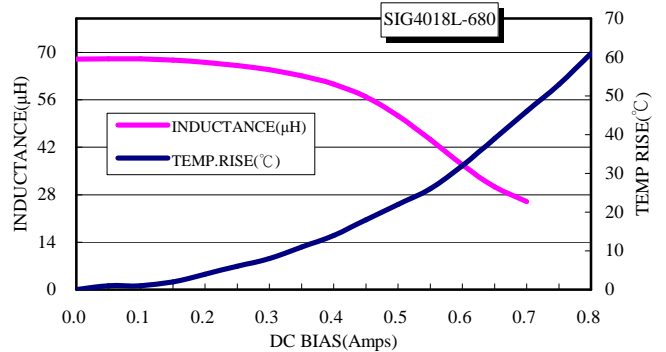
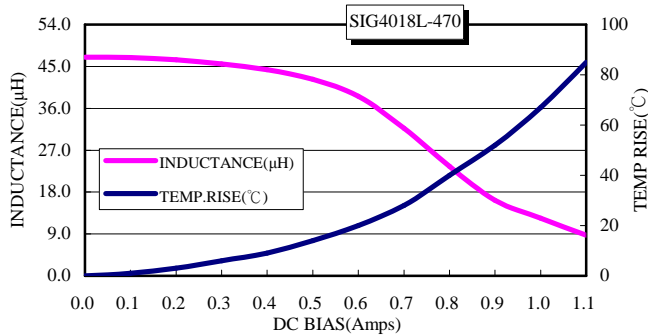
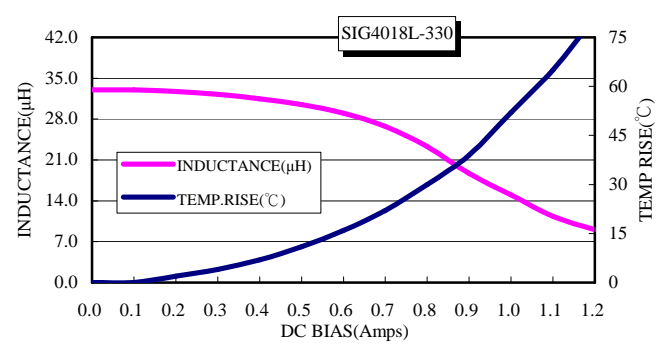
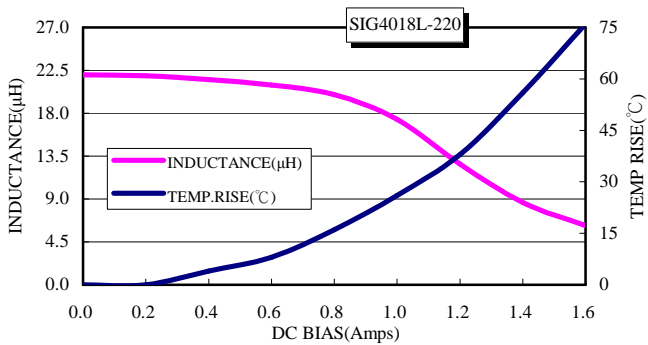
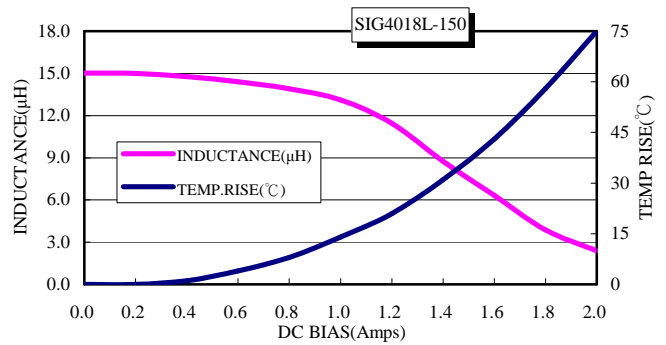
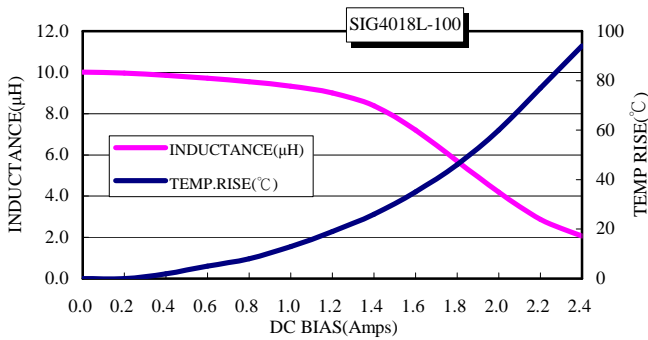
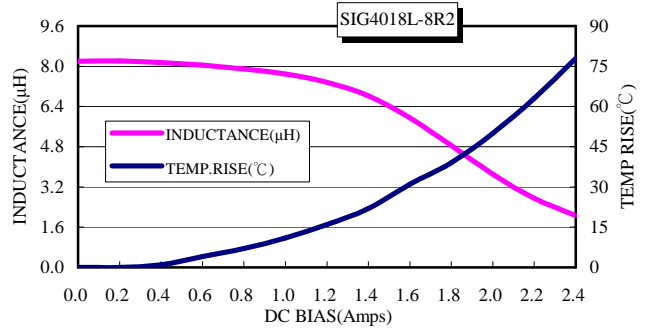
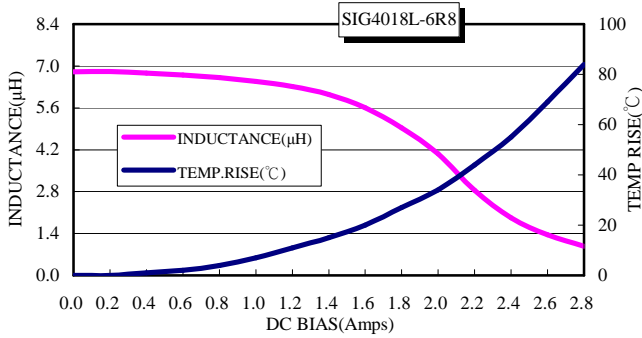


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