Sealed Choke Coil SDEM25201T type

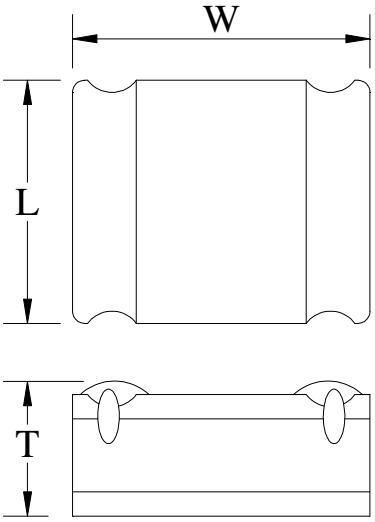
Features

Low profile：2.5 mm x 2.0 mm x 1.0 mm
High performance (Isat) realized by metal dust core.
Low loss realized with low DCR
High magnetic shield construction should actualize high resolution for EMC protection.
100% lead (Pb) free meet RoHS standard

Application

DC/DC converter for CPU in Notebook PC
Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc..
VRM for server

Outline Dimensions

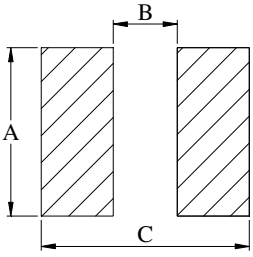


Code	Dimensions(mm)
L	2.0 ± 0.2
W	2.5 ± 0.2
T	1.0 Max.

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

Recommend Land Pattern Dimensions

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



A	2.1
B	0.8
C	2.6

Unit : mm

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
SDEM25201T-R24MS	0.24	19	23	4.60	4.30	7.00	6.30
SDEM25201T-R33MS	0.33	24	29	4.50	4.20	6.50	5.85
SDEM25201T-R47MS	0.47	29	35	4.00	3.60	5.50	5.00
SDEM25201T-R68MS	0.68	39	47	3.55	3.20	4.20	3.78
SDEM25201T-1R0MS	1.0	52	62	3.30	3.00	4.00	3.60
SDEM25201T-1R5MS	1.5	84	100	2.50	2.20	3.10	2.80
SDEM25201T-2R2MS	2.2	95	115	2.15	1.97	2.60	2.30
SDEM25201T-3R3MS	3.3	180	216	1.70	1.53	1.80	1.62
SDEM25201T-4R7MS	4.7	215	258	1.60	1.45	1.70	1.55
SDEM25201T-6R8MS	6.8	350	420	1.10	1.00	1.35	1.22
SDEM25201T-100MS	10.0	574	689	0.95	0.85	1.20	1.10
SDEM25201T-150MS	15.0	925	1,110	0.58	0.52	0.80	0.72
SDEM25201T-220MS	22.0	1,000	1,200	0.50	0.45	0.66	0.60

*：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℃

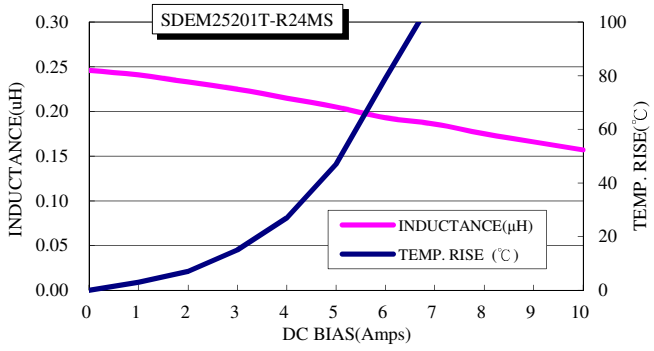
Note 4.： Isat : DC current (A) that will cause L0 to drop approximately 30%

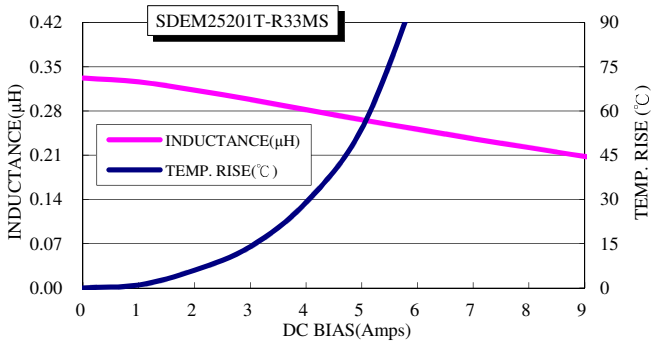
Note 5.： Operating Temperature Range -55℃ to + 125℃

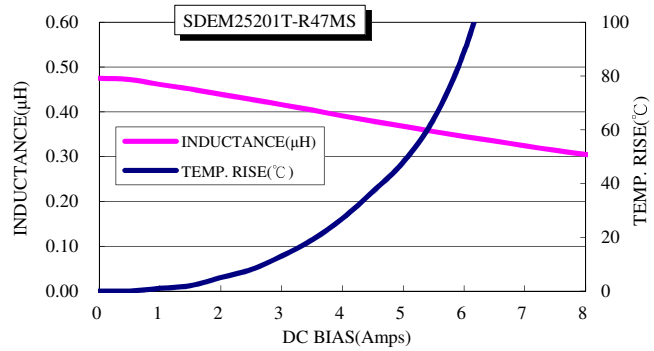
Note 6.： The part temperature (ambient + temp rise) should not exceed 125℃ under the worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.

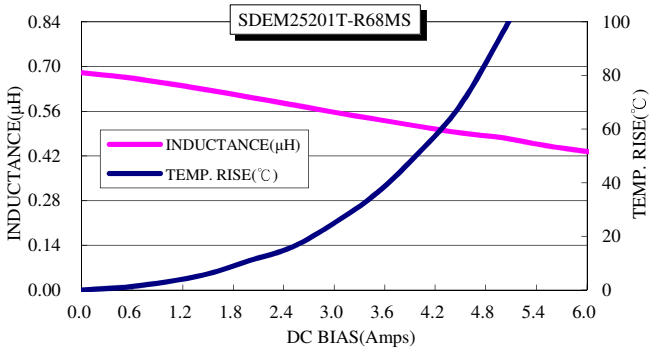
Note 7.： The rated current as listed is either the saturation current or the heating current depending on which value is lower.

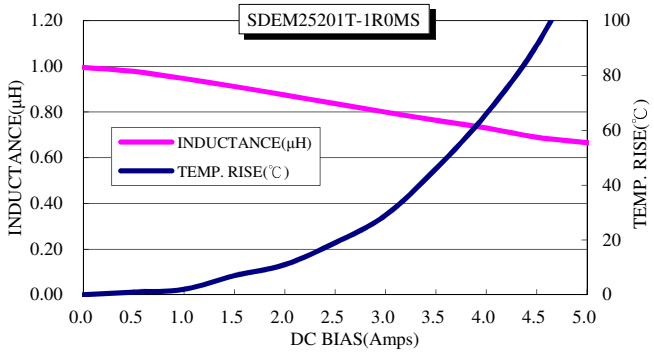
Current Characteristic

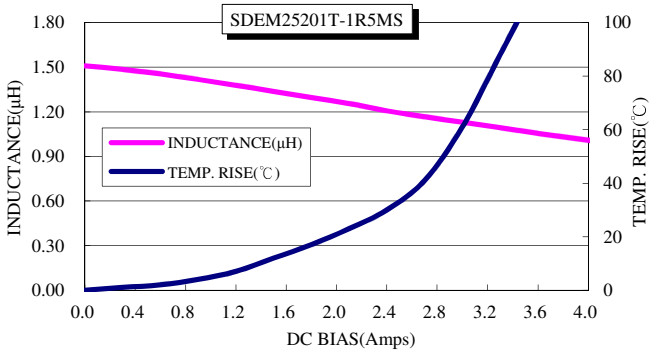


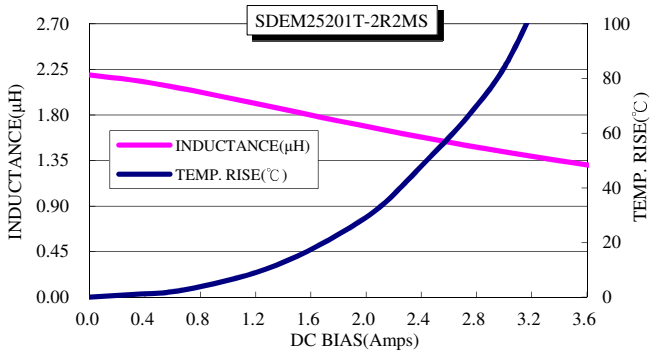


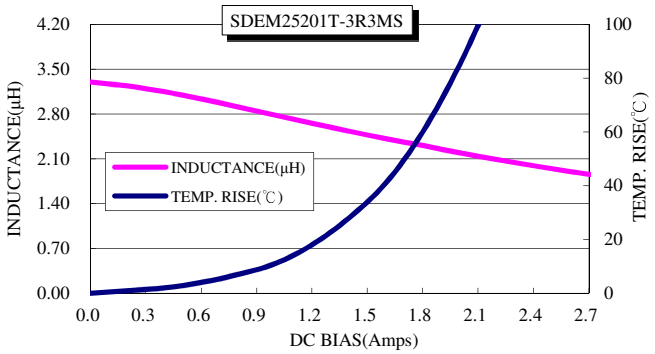


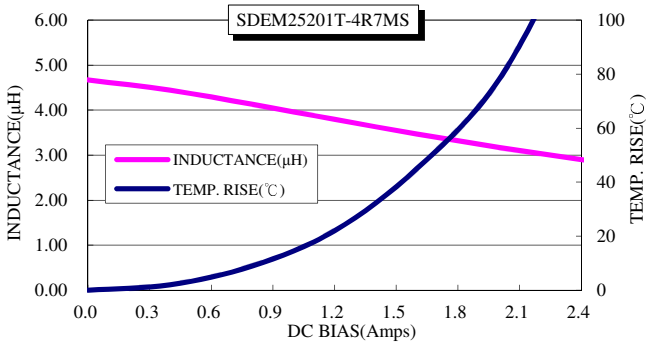


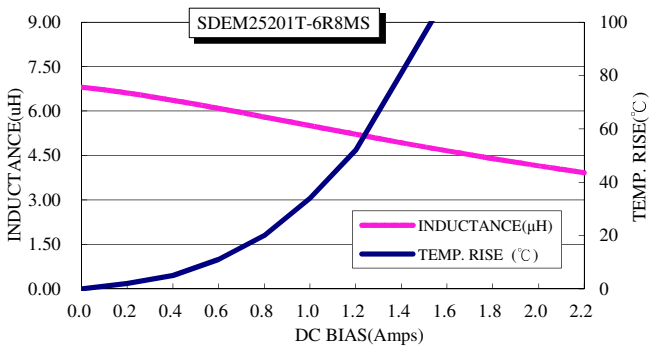


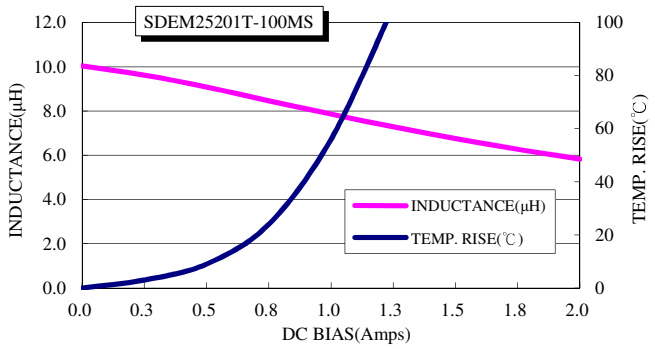


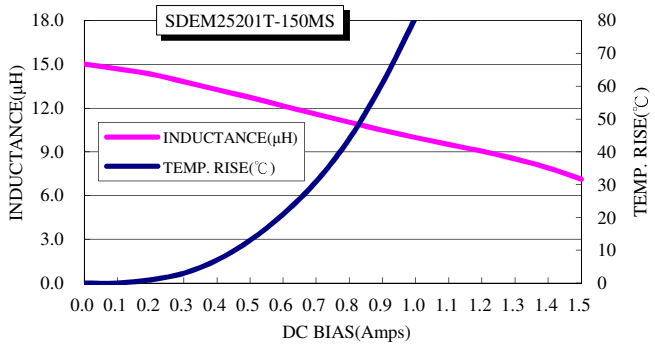


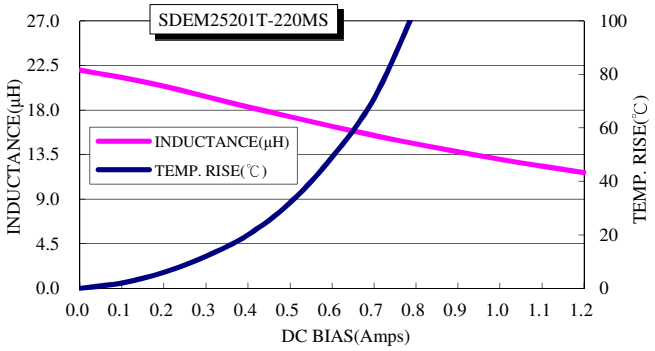



SDEM25201T-4R7MS
INDUCTANCE(μH)
TEMP. RISE(℃)
INDUCTANCE(μH)
TEMP. RISE(℃)
DC BIAS(Amps)


SDEM25201T-6R8MS
INDUCTANCE(μH)
TEMP. RISE(℃)
INDUCTANCE(μH)
TEMP. RISE (℃)
DC BIAS(Amps)


SDEM25201T-100MS
INDUCTANCE(μH)
TEMP. RISE(℃)
INDUCTANCE(μH)
TEMP. RISE(℃)
DC BIAS(Amps)


SDEM25201T-150MS
INDUCTANCE(μH)
TEMP. RISE(℃)
INDUCTANCE(μH)
TEMP. RISE(℃)
DC BIAS(Amps)


SDEM25201T-220MS
INDUCTANCE(μH)
TEMP. RISE(℃)
INDUCTANCE(μH)
TEMP. RISE(℃)
DC BIAS(Amps)