SMD Power Choke Coil

TMPC0603H-Series(G)-D

1. Features

1. Carbonyl powder inductor.
2. Compact design.
3. High current，low DCR，high efficiency.
4. Very low acoustic noise and very low leakage flux noise.
5. High reliability.
6. 100% Lead(Pb) & Halogen-Free and RoHS compliant.

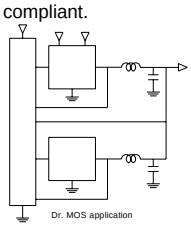
Halogen-free

Pb-free

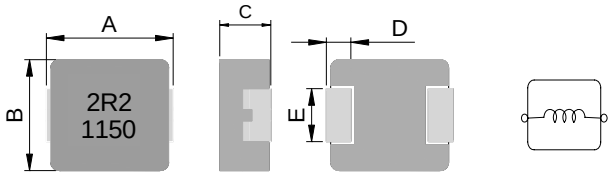
2. Applications

Note PC power system，incl. IMVP-6

DC/DC converter.

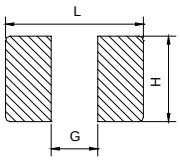


3. Dimensions



Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
TMPC0603H	7.3±0.3	6.6±0.3	2.8±0.2	1.8±0.3	3.0±0.3

Recommend PC Board Pattern



L(mm)	G(mm)	H(mm)
8.4	2.5	3.5

4. Part Numbering

TMPC	0603	H	-	2R2	MG	-	D
A	B	C		D	E		F

A: Series
B: Dimension — BxC
C: Type — Carbonyl powder
D: Inductance — 2R2=2.2uH
E: Inductance Tolerance — M=±20%；Y=±30%
F: D/C — 印字:黑色. 2R2 及 D/C 1150 (D/C 前二碼是年份,後二碼是週期,依實際生產週期而定)

5. Specification

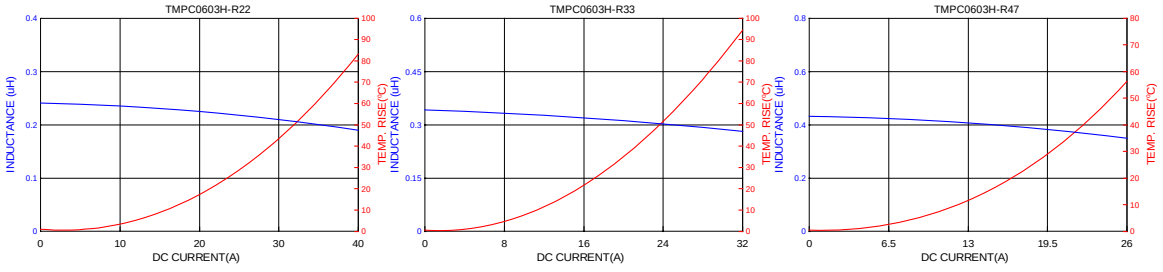
Part Number	Inductance L0 (uH) @ 0 A	I rms (A) typ.	I sat (A) typ.	DCR (mΩ) typ. @25℃	DCR (mΩ) max. @25℃
TMPC0603H-R22YG-D	0.22±30%	23.0	40.0	2.1	2.8
TMPC0603H-R33MG-D	0.33±20%	20.0	32.0	3.5	3.9
TMPC0603H-R47MG-D	0.47±20%	17.5	26.0	4.0	4.2
TMPC0603H-R56MG-D	0.56±20%	16.5	25.5	4.7	5.0
TMPC0603H-R68MG-D	0.68±20%	15.5	25.0	4.8	5.5
TMPC0603H-R75MG-D	0.75±20%	14.5	24.5	5.5	6.6
TMPC0603H-R82MG-D	0.82±20%	13.0	24.0	6.7	8.0
TMPC0603H-1R0MG-D	1.00±20%	11.0	22.0	8.3	10
TMPC0603H-1R5MG-D	1.50±20%	9.0	18.0	13	15
TMPC0603H-1R8MG-D	1.80±20%	8.5	16.0	14	17
TMPC0603H-2R2MG-D	2.20±20%	8.0	14.0	18	20
TMPC0603H-2R5MG-D	2.50±20%	7.0	13.0	20	22
TMPC0603H-3R3MG-D	3.30±20%	6.0	13.5	28	30
TMPC0603H-4R7MG-D	4.70±20%	5.5	10.0	37	40
TMPC0603H-5R6MG-D	5.60±20%	5.0	9.0	43	48
TMPC0603H-6R8MG-D	6.80±20%	4.5	8.0	54	60
TMPC0603H-8R2MG-D	8.20±20%	4.0	7.5	64	68
TMPC0603H-100MG-D	10.0±20%	3.5	6.0	75	85

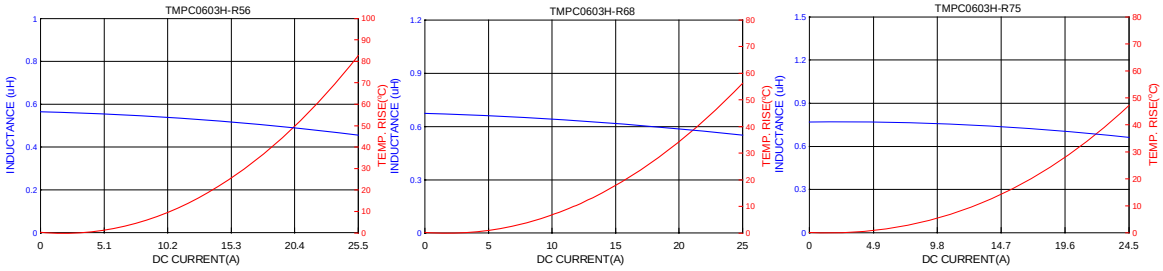
Part Number	Inductance L0 (uH) @ 0 A	I rms (A) typ.	I sat (A) typ.	DCR (mΩ) typ. @25℃	DCR (mΩ) max. @25℃
TMPC0603H-220MG-D	22.0±20%	2.0	3.5	165	190

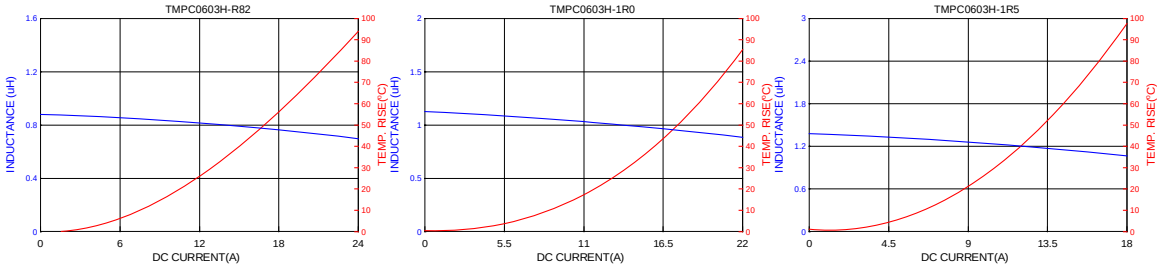
Note:

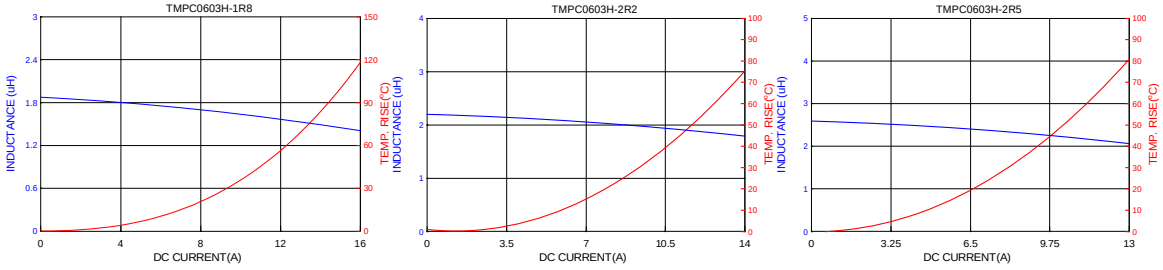
1. Test frequency : L : 100KHz /1.0V
2. All test data referenced to 25℃ ambient.
3. Testing Instrument : L/Q: HP4284A,CH11025,CH3302,CH1320 ,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER.
4. Heat Rated Current (Irms) will cause the coil temperature rise approximately △t40℃
5. Saturation Current (Isat) will cause L0 to drop approximately 20%
6. The part temperature (ambient + temp rise) should not exceed 125℃under worst case operating conditions.Circuit design,component,PCB trace size and thickness,airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
7. Special inquiries besides the above common used types can be met on your requirement.

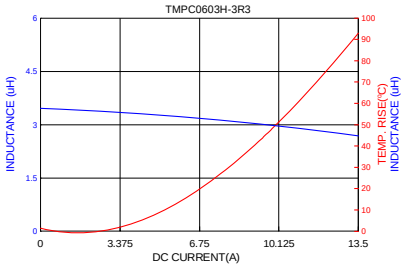
6. Typical Performance Curves

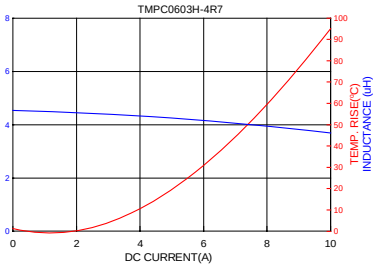


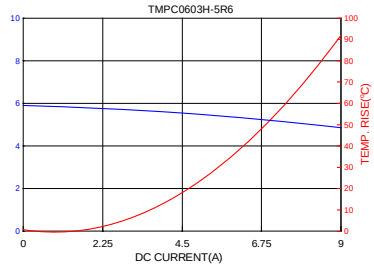


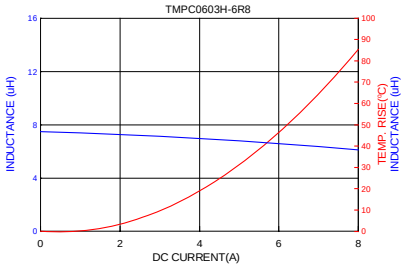


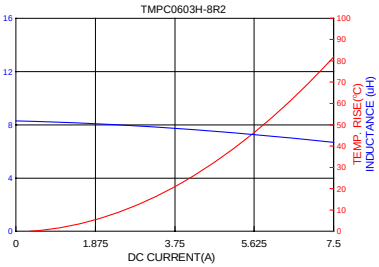



TMPC0603H-3R3
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)


TMPC0603H-4R7
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)


TMPC0603H-5R6
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)


TMPC0603H-6R8
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)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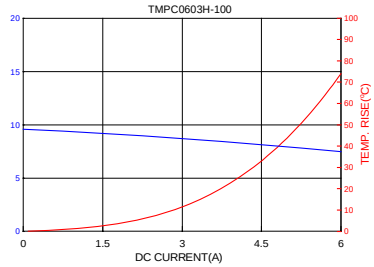
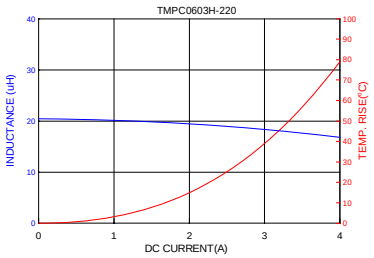
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)


TMPC0603H-100
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)


TMPC0603H-220
INDUCTANCE (uH)
TEMP. RISE(°C)
DC CURRENT(A)