

SMD Power Choke Coil

TMPC0603H-Series(G)-D

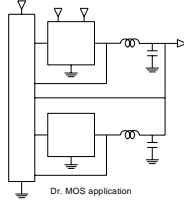
1. Features

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.

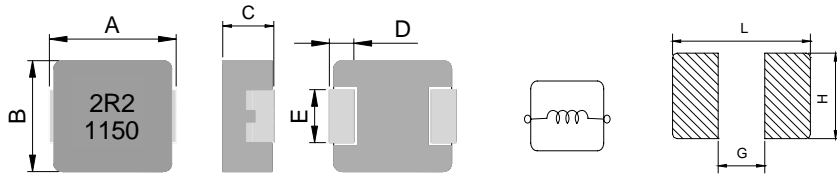


2. Applications

Note PC power system · incl. IMVP-6
DC/DC converter.



3. Dimensions



Recommend PC Board Pattern

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

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

4. Part Numbering



- A: Series
 - B: Dimension
 - C: Type
 - D: Inductance
 - E: Inductance Tolerance
 - F: D/C
- BxC
 - Carbonyl powder
 - 2R2=2.2uH
 - M=±20% ; Y=±30%
 - 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°C	DCR (mΩ) max. @25°C
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°C	DCR (mΩ) max. @25°C
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°C 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 $\Delta t \leq 40^\circ\text{C}$ (keep 1min.).
5. Saturation Current (Isat) will cause L0 to drop $\leq 20\%$ typical. (keep quickly).
6. The part temperature (ambient + temp rise) should not exceed 125°C 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

