

SMD Power Choke Coil

TMPC0412HP-Series(G)-Z02

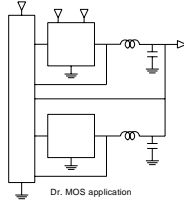
1. Features

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.

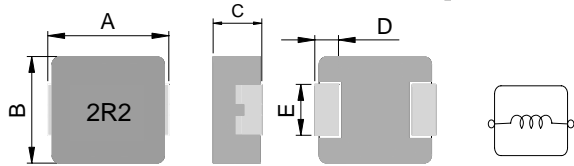


2. Applications

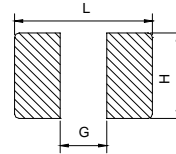
Note PC power system · incl. IMVP-6
DC/DC converter.



3. Dimensions



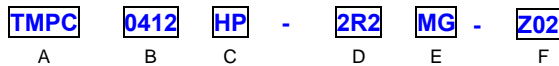
Recommend PC Board Pattern



L(mm)	G(mm)	H(mm)
5.2	2.2	2.3

Series	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
TMPC0412HP	4.45±0.25	4.06±0.25	1.0±0.2	0.76±0.30	2.0±0.20

4. Part Numbering



- A: Series
 - B: Dimension
 - C: Type
 - D: Inductance
 - E: Inductance Tolerance
 - F: Control S/N
- BxC
H: Carbonyl powder ; P: PAD broaden
2R2=2.20uH
M=±20% ; Y=±30%
印字:黑色,單向印字

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
TMPC0412HP-R10YG-Z02	0.10±30%	11.5	25	4.3	5.5
TMPC0412HP-R22MG-Z02	0.22±20%	8.5	20	6.6	8.0
TMPC0412HP-R47MG-Z02	0.47±20%	6.0	6.5	18	20
TMPC0412HP-1R0MG-Z02	1.00±20%	4.0	6.0	41	47
TMPC0412HP-1R5MG-Z02	1.50±20%	3.0	4.0	55	63.3
TMPC0412HP-2R2MG-Z02	2.20±20%	2.8	3.5	69.2	80
TMPC0412HP-3R3MG-Z02	3.30±20%	2.3	3.0	84	97
TMPC0412HP-4R7MG-Z02	4.70±20%	2.0	2.5	128	145
TMPC0412HP-5R6MG-Z02	5.60±20%	1.7	2.3	180	208
TMPC0412HP-6R8MG-Z02	6.80±20%	1.5	1.7	300	360
TMPC0412HP-8R2MG-Z02	8.20±20%	1.4	1.6	313	376
TMPC0412HP-100MG-Z02	10.0±20%	1.3	1.4	410	463

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 (I_{rms}) will cause the coil temperature rise approximately Δt40°C
5. Saturation Current (I_{sat}) will cause L0 to drop approximately 20%
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

