

SMD Power Inductor

TMPC1003H-Series(G)-D

1. Features

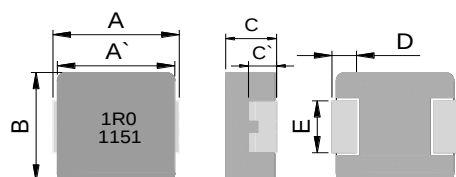
1. Magnetic metal powder inductor.
2. Compact design.
3. High current · low DCR · high efficiency.
4. Very low acoustic noise and very low leakage flux noise.
5. High reliability.
6. 100% Lead(Pb)-Free and RoHS compliant.



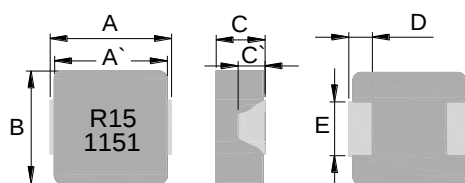
2. Applications

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

3. Dimensions



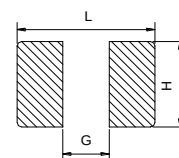
leadframe



non-leadframe



Recommend PC Board Pattern



L(mm)	G(mm)	H(mm)
13.6	5.4	3.5

Note: 1. The above PCB layout reference only.
2. Recommend solder paste thickness at 0.15mm and above.

Series	Type	A(mm)	A'(mm)	B(mm)	C(mm)	C'(mm)	D(mm)	E(mm)
TMPC1003H	leadframe	11.0±0.5	10.0±0.3	10.0±0.3	2.8±0.2	1.9ref	2.3±0.3	3.0±0.3
	non-leadframe							

4. Part Numbering

TMPC	1003	H	-	1R0	MG	-	D
A	B	C		D	E		F

A: Series

B: Dimension

C: Type

D: Inductance

E: Inductance Tolerance

F: 印 D/C

BxC

Magnetic metal powder

1R0=1.00uH

M=±20%

印字:黑色 1R0 及 D/C 1151 (11 年,51 週期)(依實際生產日期而定).

5. Specification

Part Number	Inductance L0 (uH)±20% @ 0 A	I rms (A) Typ.	I sat (A) Typ.	DCR (mΩ) Typ. @25℃	DCR (mΩ) Max. @25℃	Type
TMPC1003H-R15YG-D	0.15±30%	35	60	0.9	1.1	non-leadframe
TMPC1003H-R22MG-D	0.22	30	55	1.1	1.3	non-leadframe
TMPC1003H-R24MG-D	0.24	30	50	1.2	1.4	non-leadframe
TMPC1003H-R33MG-D	0.33	25	47	1.2	1.5	non-leadframe
TMPC1003H-R36MG-D	0.36	23	40	1.3	1.6	non-leadframe
TMPC1003H-R47MG-D	0.47	20	33	2.1	2.5	non-leadframe
TMPC1003H-R56MG-D	0.56	16	24	2.6	3.0	leadframe
TMPC1003H-R82MG-D	0.82	15	22	3.9	4.5	leadframe
TMPC1003H-1R0MG-D	1.00	15	20	4.6	6.0	leadframe
TMPC1003H-1R5MG-D	1.50	13	20	6.5	7.5	leadframe
TMPC1003H-2R2MG-D	2.20	12	16	8.0	9.0	leadframe
TMPC1003H-3R3MG-D	3.30	9	14	14.5	16	leadframe
TMPC1003H-4R7MG-D	4.70	7	13	20.5	22.5	leadframe
TMPC1003H-5R6MG-D	5.60	7	12	28	32.5	leadframe
TMPC1003H-6R8MG-D	6.80	6.5	9.5	30.2	35	leadframe
TMPC1003H-8R2MG-D	8.20	6	8.5	42	48	leadframe
TMPC1003H-100MG-D	10.0	5	8	50	55	leadframe
TMPC1003H-150MG-D	15.0	4	7	72	86	leadframe
TMPC1003H-220MG-D	22.0	3	5.5	115	140	leadframe
TMPC1003H-470MG-D	47.0	2	4	216	260	leadframe

Note:

1. Test frequency : Ls : 100KHz /1.0V.
2. All test data referenced to 25℃ ambient.
3. Testing Instrument(or equ) : L: HP4284A,CH11025,CH3302,CH1320,CH1320S LCR METER / Rdc:CH16502,Agilent33420A MICRO OHMMETER.
4. Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 40℃
5. Saturation Current (Isat) will cause L0 to drop approximately 30%.
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.

10. Typical Performance Curves

