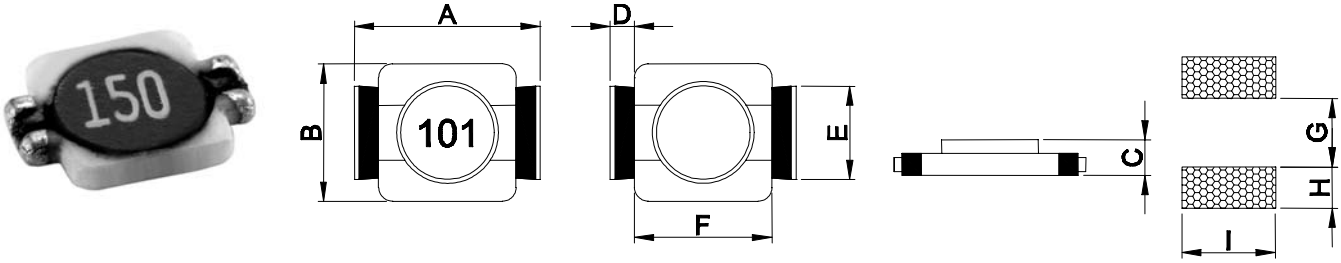
SMD Mini Power Inductor－MPI



■Features

－Very low profile.
－Constructed enclosed in a rugged to provide optimum pick and place operations.
－High inductance & high current ultra low profile power inductors.

■Applications

－LCD Televisions
－Personal Computers
－Handheld Communication
－DC/DC Converters, etc.

■Characteristics

－Rated Current (IDC): The DC current when the inductance becomes 10% lower than its initial value. (Ta=25°C)
－Operating temperature range: -40～+100°C

■Dimensions

Unit: mm

Type	A max.	B ±0.3	C max.	D	E	F	G	H	I
MPI0610	6.5	5.3	1.2	0.9	3.0	4.5	4.0	1.5	3.4
MPI0612	6.5	5.3	1.2	0.9	3.0	4.5	4.0	1.5	3.4
MPI0620	6.5	5.3	2.0	0.9	3.0	4.5	4.0	1.5	3.4

■Inductance and rated current ranges

－MPI0610　1.2～330μH　2.1～0.13A
－MPI0612　1.2～100μH　1.8～0.235A
－MPI0620　1.0～1000μH　2.5～0.08A
－Electrical specifications at 25°C

■Product Identification

MPI	0610	M	T	101
Product Type	Dimensions (AxBxC)	Inductor Tolerance	Packaging Style	Inductance
	0610: 6.5×5.3×1.2 0612: 6.5×5.3×1.2 0620: 6.5×5.3×2.0	M: ±20%	T: Tape and Reel	1R1: 1.1μH 470: 47μH 101: 100μH

■Electrical Characteristics

MPI0610 Type

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	I DC (A) max.
1R2	1.2	M	100KHz, 0.1V	0.08	2.1
1R5	1.5	M	100KHz, 0.1V	0.10	1.9
2R2	2.2	M	100KHz, 0.1V	0.12	1.6
3R3	3.3	M	100KHz, 0.1V	0.16	1.3
4R7	4.7	M	100KHz, 0.1V	0.20	1.1
6R8	6.8	M	100KHz, 0.1V	0.32	0.9
100	10	M	100KHz, 0.1V	0.41	0.8
150	15	M	100KHz, 0.1V	0.65	0.65
220	22	M	100KHz, 0.1V	0.85	0.50
330	33	M	100KHz, 0.1V	1.30	0.40
470	47	M	100KHz, 0.1V	1.80	0.35
680	68	M	100KHz, 0.1V	2.50	0.30
101	100	M	100KHz, 0.1V	3.50	0.25
151	150	M	100KHz, 0.1V	6.50	0.18
221	220	M	100KHz, 0.1V	8.50	0.16
331	330	M	100KHz, 0.1V	15.0	0.13

MPI0612 Type

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	I DC (A) max.
1R2	1.2	M	100KHz, 0.1V	0.060	1.80
2R2	2.2	M	100KHz, 0.1V	0.125	1.20
3R3	3.3	M	100KHz, 0.1V	0.155	0.96
4R7	4.7	M	100KHz, 0.1V	0.206	0.90
6R8	6.8	M	100KHz, 0.1V	0.240	0.80
100	10	M	100KHz, 0.1V	0.370	0.70
150	15	M	100KHz, 0.1V	0.460	0.60
180	18	M	100KHz, 0.1V	0.580	0.56
220	22	M	100KHz, 0.1V	0.668	0.50
270	27	M	100KHz, 0.1V	0.950	0.45
330	33	M	100KHz, 0.1V	1.100	0.42
390	39	M	100KHz, 0.1V	1.280	0.38
470	47	M	100KHz, 0.1V	1.380	0.34
560	56	M	100KHz, 0.1V	1.700	0.30
680	68	M	100KHz, 0.1V	2.100	0.28
820	82	M	100KHz, 0.1V	2.700	0.26
101	100	M	100KHz, 0.1V	3.100	0.235

MPI0620 Type

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	I DC (A) max.
1R0	1.0	M	100KHz, 0.1V	0.04	2.5
1R5	1.5	M	100KHz, 0.1V	0.06	2.2
2R2	2.2	M	100KHz, 0.1V	0.07	1.8
3R3	3.3	M	100KHz, 0.1V	0.10	1.4
4R7	4.7	M	100KHz, 0.1V	0.12	1.2
6R8	6.8	M	100KHz, 0.1V	0.19	1.1
100	10	M	100KHz, 0.1V	0.30	1.0
150	15	M	100KHz, 0.1V	0.40	0.8
220	22	M	100KHz, 0.1V	0.54	0.6
330	33	M	100KHz, 0.1V	0.74	0.5
470	47	M	100KHz, 0.1V	1.10	0.45
680	68	M	100KHz, 0.1V	1.60	0.35
101	100	M	100KHz, 0.1V	2.30	0.30
151	150	M	100KHz, 0.1V	3.20	0.25
221	220	M	100KHz, 0.1V	5.70	0.20
331	330	M	100KHz, 0.1V	8.20	0.16
471	470	M	100KHz, 0.1V	10.8	0.14
681	680	M	100KHz, 0.1V	17.2	0.12
102	1000	M	100KHz, 0.1V	22.6	0.08