

SMT Power Inductor (MOLDING TYPE)

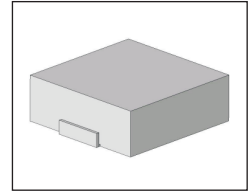
MPL10X Type

Features

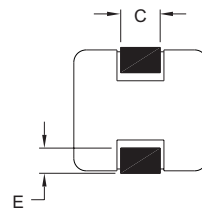
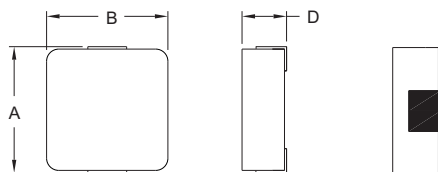
- RoHS compliant.
- Low profile, high current SMD type.
- Frequency range up to 1MHz.
- Lowest DCR/ μ H, in this package size.
- Low buzz noise due to its gap-less structure.

Applications

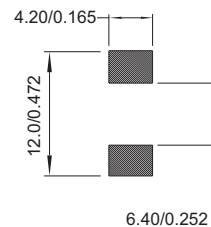
- Notebook/Desktop/Server/Video Card applications.
- High current POL converters.
- Low profile, high current power supplies.
- Battery powered devices.
- Ideal for power source circuits, DC-DC converter.
- DC-AC inverters inductor application.



Mechanical Dimension:



RECOMMENDED PAD PATTERNS



UNIT : mm/inch
 A = 11.50 / 0.452 Max.
 B = 10.00 $\pm$ 0.30 / 0.394 $\pm$ 0.012
 E = 2.30 / 0.091

Electrical Characteristics: At 25°C: 100KHz, 0.25V

PART NO.	L0 (μ H)	DCR (m Ω) TYP.	DCR (m Ω) MAX.	Isat ¹ (Adc)	I _r ² (Adc)	Dimension "C" mm / inch $\pm$ 0.5 / $\pm$ 0.02	Dimension "D" mm / inch MAX
MPL104-0R2	0.20 $\pm$ 20%	0.75	0.90	40	32	3.5 / 0.138	4.0 / 0.157
MPL104-R33	0.33 $\pm$ 20%	1.00	1.20	35	30	3.5 / 0.138	4.0 / 0.157
MPL104-R36	0.36 $\pm$ 20%	0.818	0.90	50	35	3.7 / 0.146	4.0 / 0.157
MPL104-0R4	0.40 $\pm$ 20%	1.05	1.20	32	30	3.5 / 0.138	4.0 / 0.157
MPL104-0R5	0.50 $\pm$ 20%	1.50	1.70	32	28	3.5 / 0.138	4.0 / 0.157
MPL104-0R6	0.60 $\pm$ 20%	1.50	1.70	30	28	3.5 / 0.138	4.0 / 0.157
MPL104-0R9	0.90 $\pm$ 20%	2.30	2.50	27	25	3.0 / 0.118	4.0 / 0.157
MPL105-R36	0.36 $\pm$ 20%	0.75	0.83	55	40	3.7 / 0.146	5.0 / 0.197
MPL105-1R0	1.00 $\pm$ 20%	2.30	2.50	35	25	3.0 / 0.118	5.0 / 0.197
MPL105-1R2	1.20 $\pm$ 20%	2.50	2.90	35	20	3.0 / 0.118	5.5 / 0.217

1. Isat is the DC current which cause the inductance drop approximately 30% of its nominal inductance without current.
2. I_r is the DC current which cause the surface temperature of the part increase approximately 40°C
3. Operating temperature range : -55°C to 125°C
4. Ambient temperature, Maximum : 85°C.



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