

# SMT Power Inductor (MOLDING TYPE)

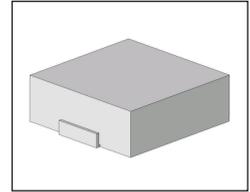
## MPO10X Type

### Features

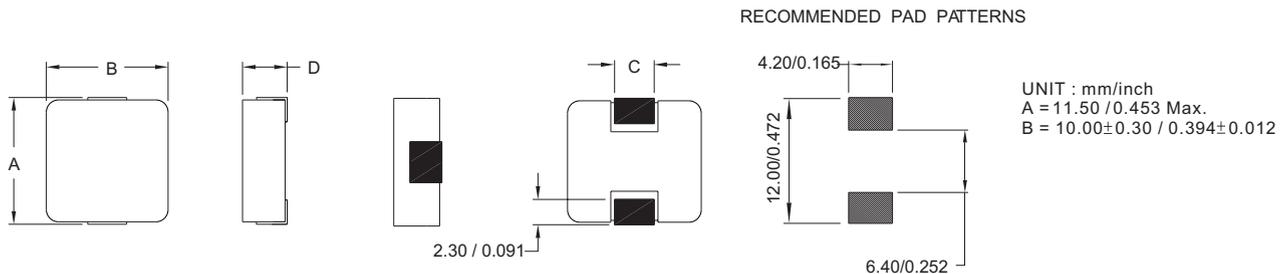
- RoHS compliant.
- Low profile, high current SMD type.
- Frequency range up to 1MHz.
- Lowest DCR/ $\mu\text{H}$ , in this package size.
- Low buzz noise due to its gap-less structure.

### 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:



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

PART NO.	L0 ( $\mu\text{H}$ )	DCR ( $\text{m}\Omega$ ) TYP.	DCR ( $\text{m}\Omega$ ) MAX.	Isat <sup>1</sup> (A dc)	I <sub>r</sub> <sup>2</sup> (A dc)	Dimension "C" mm / inch $\pm$ 0.5 / $\pm$ 0.02	Dimension "D" mm / inch MAX
MPO1035-R68	0.68 $\pm$ 20%	2.30	2.80	38	25	2.3 / 0.091	3.5 / 0.138
MPO1035-1R0	1.00 $\pm$ 20%	3.35	3.80	26	21	2.0 / 0.079	3.5 / 0.138
MPO104-R36	0.36 $\pm$ 20%	1.08	1.20	45	30	3.5 / 0.138	4.0 / 0.157
MPO104-R39	0.39 $\pm$ 20%	1.08	1.20	35	30	3.5 / 0.138	4.0 / 0.157
MPO104-R45-C	0.45 $\pm$ 20%	1.25	1.45	35	30	3.5 / 0.138	4.0 / 0.157
MPO104-R56	0.56 $\pm$ 20%	1.60	1.80	36	25	3.0 / 0.118	4.0 / 0.157
MPO104-0R9	0.90 $\pm$ 20%	2.45	2.65	27	25	3.0 / 0.118	4.0 / 0.157
MPO104-1R0	1.00 $\pm$ 20%	2.80	3.00	30	21	2.6 / 0.103	4.0 / 0.157
MPO104-1R5	1.50 $\pm$ 20%	3.80	4.20	33	20	2.3 / 0.091	4.0 / 0.157

1. Isat is the DC current which cause the inductance drop approximately 20% of its nominal inductance without current.
2. I<sub>r</sub> 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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