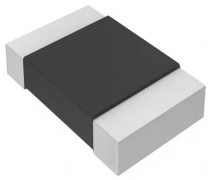
PROSEMI

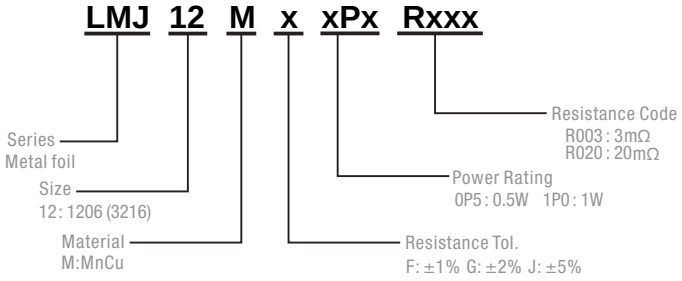
Current Sensing Resistors
LMJ12 Series

Description

- Proprietary processing technique produces extremely low resistance values
- Very low inductance
- Low thermal EMF
- Metallic Material

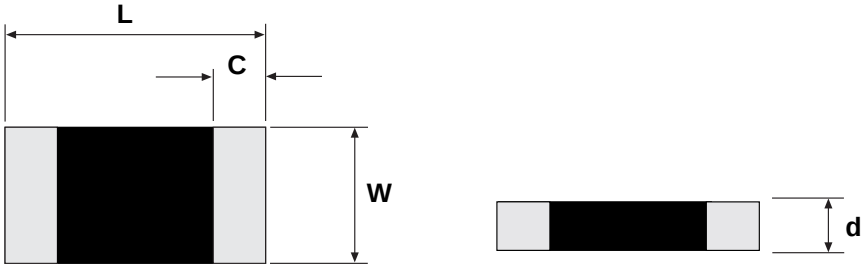


Part Numbering System



Parameter	Standard
Power Rating	0.5~1W
Resistance Value	1~30mΩ
Operating Temperature Range	-55 to +170°C
Component Temperature Coefficient (TCR)	± 50 ppm/°C
Maximum Working Voltage (V)	$(P \times R)^{1/2}$

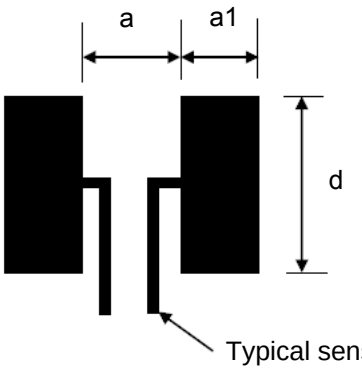
Dimensions



Unit: Millimeters

Style	L	W	C	d
LMJ 12	3.2±0.2	1.6±0.2	1.1±0.3 (1mΩ)	0.75±0.2
			0.5±0.3 (2~30mΩ)	

Recommended land pattern



Unit: Millimeters

Resistance Range (Ω)	a	a1	d
0.001	1.0	2.3	1.8
0.002~0.030	1.6	1.7	1.8

Packaging

Quantity: 5, 000pcs

8mm wide tape on 178mm(7 inch) diameter reel -specification EIA Standard 481.

Performance

Test Items	Conditions of Test	Test Limits
Thermal shock	- 55 °C to + 150 °C, 300 cy cles, 15 min at each extreme	± 1.0 %
Short time overload	5 x rated power for 5 s	± 0.5 %
Low temperature operation	- 55 °C,1000 h	± 0.5 %
High temperature exposure	1000h at + 170 °C	± 1.0 %
Moisture resistance	MIL-STD- 202, method 106, 0 % power, 7b not required	± 1.0 %
Load life	1000 h at 70 °C , 1.5 h "ON", 0.5 h "OFF"	± 1.0 %
Resistance to bonding exposure	260 °C for 10 s	± 0.5 %

Derating Curve