

# OMEGA PRODUCTS PRIVATE LIMITED

## Metal Oxide Resistors

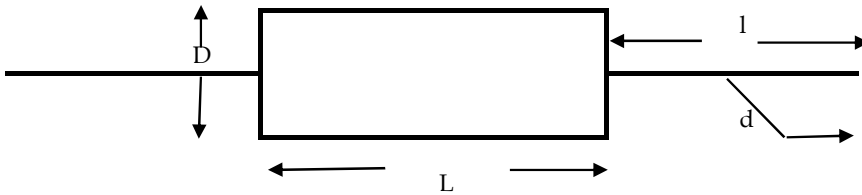
### OMO Series

#### DESCRIPTION

A homogeneous Film is sputtered deposited on 85 to 96% Alumina Ceramic Rods and conditioned to achieve the desired Temperature Coefficient. Nickel plated caps are firmly pressed on the metallised rods. A special machine is used to achieve the highly precise resistance tolerance by cutting a helical groove in the film layer. Tin coated electrolytic copper wire are spot welded to the center of the termination caps. The resistor are coated with special epoxy or Flame proof Epoxy for Electrical, Mechanical and climatic protection, colour codes/ Alpha numeric marking is applied with respect to designated value on coated Resistor. All Resistors are subjected to testing before final taping process.

#### FEATURES :

- Wide Range of Resistors
- Pulse withstanding design available
- Flame proof coating available
- RoHS Compliant
- Custom Built Design and values available



#### SPECIFICATION

TYPE	WATTAGE	L	D	l	d	Working Voltage	Resistance Range	TCR
OMO 0.5	0.5 W	9.5 ± 0.5	3.5 ± 0.2	25 ± 0.2	0.60 ± 0.02	350V	10R to 1M	200 to 1200
OMO 1	1W	12.0 ± 1	4.5 ± 0.5	25 ± 0.2	0.78 ± 0.02	500V	10R to 1M	200 to 1200
OMO 2	2W	16.0 ± 1	5.5 ± 0.5	25 ± 0.2	0.78 ± 0.02	500V	10R to 1M	200 to 1200
OMO 3	3W	17.5 ± 1	6.0 ± 0.5	31 ± 2	0.78 ± 0.02	700V	10R to 1M	200 to 1200
OMO 5	5W	22.0 ± 1	7.5 ± 0.5	31 ± 2	0.78 ± 0.02	1000V	10R to 1M	200 to 1200
OMO 7	7W	25.0 ± 1	8.5 ± 0.5	31 ± 2	0.78 ± 0.02	1300V	10R to 1M	200 to 1200
OMO 10	10W	42.0 ± 1	7.5 ± 0.5	31 ± 2	0.78 ± 0.02	1600V	10R to 1M	200 to 1200
OMO 12	12W	54.0 ± 1	8.5 ± 0.5	31 ± 2	0.78 ± 0.02	1700V	10R to 1M	200 to 1200
OMO 15	15W	67.0 ± 1	8.5 ± 0.5	31 ± 2	0.78 ± 0.02	1700V	10R to 1M	200 to 1200

#### PERFORMANCE CHARACTERISTIC

	Requirement Shall not Exceed
Short Term Overload (2.5 x Rated voltage - 5 Sec)	Delta R ± (1.0% +0.05 Ohms)
Load Life (Rated at 70°C 1000 Hrs 1.5/0.5 Hr ON/OFF)	Delta R ± (5.0% +0.05 Ohms)
Temperature Cycling (-55 / +155, 5 cycles)	Delta R ± (0.5% +0.05 Ohms)
Insulation Resistance (at 500V for 1 Min)	Shall not be less than 10 000 M Ohms
DWV Test	Delta R ± (0.5% +0.05 Ohms) & No Flash over at 500V
Resistance Soldering Heat (260°C 10 Sec)	Delta R ± (1.0% +0.05 Ohms)
Solderability (Solder bath dip - 5 Sec)	Greater than 95% Coverage
Resistance to Solvents (Solvent dip - 3 min)	No effect of IPA /TCE Solvents
Damp Heat Steady State (40°C/95% Rh - 56 days)	Delta R ± (5.0% +0.05 Ohms)
Vibration (10 to 2000 Hz)	Delta R ± (0.5% +0.05 Ohms)
Shock (1 Km/S <sup>2</sup> )	Delta R ± (0.5% +0.05 Ohms)
Low Temp Operation (-55°C 2 Hrs without Loading)	Delta R ± (1% +0.05 Ohms)
High Temp Operation(+155°C 16 Hrs without Loading)	Delta R ± (1% +0.05 Ohms)
Terminal Strength (Bending, Tensile, Torsion)	Delta R ± (0.5% +0.05 Ohms) & No Mech. Damage

#### **Ordering Info: OMO10 100K J 200 PPM**

\*Specifications is subject to change without notice