

# Omega Products Pvt.Ltd.

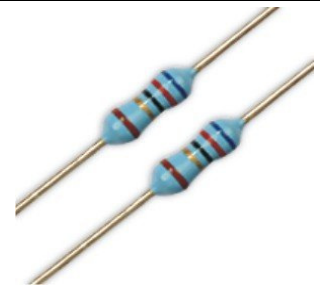
## Metal Film Resistors - OMFP Series

### DESCRIPTION

A homogeneous Film of Nicrom alloy 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 Laser machine is used to achieve the highly precise resistance tolerance by cutting a helical groove in the nicrom film layer. Tin coated electrolytic copper wire are spot welded to the center of the termination caps. The resistor are coated with special flame proof epoxy for Electrical , Mechanical and climatic protection,colour codes are applied with respect to designated value on coated Resistor.All Resistors are subjected to tesing before final taping process.

### FEATURES

Wide Range of Resistors  
 Low TCR upto 5 ppm/°C  
 Low Tolerances up to  $\pm 0.01\%$   
 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
OMFP100	1W	12.0 $\pm$ 1	4.5 $\pm$ 0.5	25 $\pm$ 0.2	0.60 /0.78 $\pm$ 0.02	500V	1R to 4M7	25, 50, 100 ppm

### PERFORMANCE CHARACTERISTIC

	Requirement Shall not Exceed
Short Term Overload (2.5 x Rated voltage - 5 Sec)	Delta R $\pm$ (0.1% +0.05 Ohms)
Load Life (Rated at 70°C 1000 Hrs 1.5/0.5 Hr ON/OFF)	Delta R $\pm$ (0.5% +0.05 Ohms)
Temperature Cycling (-55 /+155, 5 cycles )	Delta R $\pm$ (0.5% +0.05 Ohms)
Insulation Resistance (at 500V for 1 Min)	Shall not be less than 10 000 M Ohms
DWV Test (2 x Limiting voltage - 1 Min)	Delta R $\pm$ (0.02% +0.05 Ohms)
Resistance Soldering Heat (260°C 10 Sec)	Delta R $\pm$ (0.05% +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 $\pm$ (0.05% +0.05 Ohms)
Vibration (10 to 2000 Hz )	Delta R $\pm$ (0.1% +0.05 Ohms)
Shock (1 Km/S <sup>2</sup> )	Delta R $\pm$ (0.1% +0.05 Ohms)
Low Temp Operation ( -55°C 2 Hrs without Loading)	Delta R $\pm$ (0.1% +0.05 Ohms)
High Temp Operation(+155°C 16 Hrs without Loading)	Delta R $\pm$ (0.5% +0.05 Ohms)
Terminal Strength (Bending, Tensile)	Delta R $\pm$ (0.1% +0.05 Ohms) & No Mech. Damage

### Ordering Info

OMFP100 100K 1% 50 PPM T/B

\*Specifications is subject to change without notice