OMEGA PRODUCTS PVT. LTD.

Metal Film Resistors (Miniature)

OMM Series

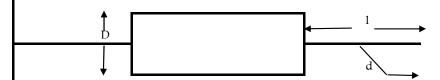
DESCRIPTION

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 fimly 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 epoxy or 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 ± 0.01%
Pulse withstanding design available
Flame proof coating available
RoHS Compliant

Custom Built Design and values available



SPECIFICATION

TYPE	WATTAGE	L	D	1	d	Working Voltage	Resistance Range	TCR
OMM40	0.4 W	3.7 ± 0.2	1.7 ± 0.2	25 ± 0.2	0.45 ± 0.02	200V	1R to 4M7	25, 50, 100
OMM50	0.50 W	6.5 ± 0.5	2.3 ± 0.2	25 ± 0.2	0.60 ± 0.02	250V	1R to 4M7	25, 50, 100
OMM60	0.60 W	6.5 ± 0.5	2.3 ± 0.2	25 ± 0.2	0.60 ± 0.02	250V	1R to 4M7	25, 50, 100
OMM100	1W	9.5 ± 0.5	3.5 ± 0.2	25 ± 0.2	0.60 ± 0.02	350V	1R to 4M7	25, 50, 100
OMM200	2W	9.5 ± 0.5	3.5 ± 0.2	25 ± 0.2	0.60 ± 0.02	500V	1R to 4M7	25, 50, 100

PERFORMANCE CHARACTERISTIC

Requirement Shall not Exceed

Short Term Overload (2.5 x Rated voltage - 5 Sec) ± (0.5% +0.05 Ohms) Delta R Load Life (Rated at 70°C 1000 Hrs 1.5/0.5 Hr ON/OFF) Delta R ± (1.0% +0.05 Ohms) Temperature Cycling (-55 / +155, 5 cycles) Delta R $\pm (0.5\% +0.05 \text{ Ohms})$ 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 ± (0.5% +0.05 Ohms) Resistance Soldering Heat (260°C 10 Sec) Delta R 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 ± (1.0% +0.05 Ohms) Vibration (10 to 2000 Hz) Delta R ± (0.5% +0.05 Ohms) Shock (1 Km/S2) Delta R ± (0.5% +0.05 Ohms) Low Temp Operation (-55°C 2 Hrs without Loading) Delta R ± (0.5% +0.05 Ohms)

High Temp Operation(+155°C 16 Hrs without Loading) Delta R \pm (1.0% +0.05 Ohms) Terminal Strength (Bending, Tensile) Delta R \pm (0.25% +0.05 Ohms) & No Mech. Damage

Ordering Info:

OMM50 100K 1% 50 PPM T/R

*Specifications is subject to change without notice