

Thin Film Precision High Wattage Resistor - PHW Series



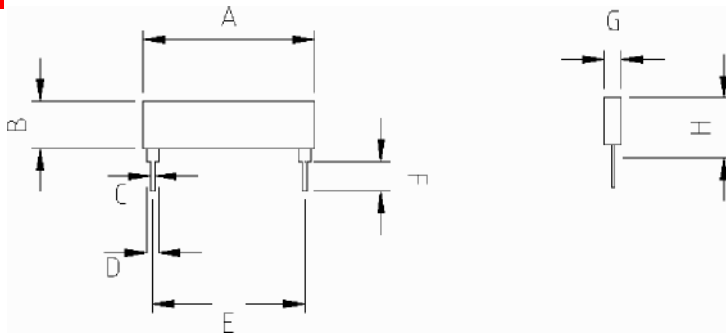
Features

- High power rating up to 3 Watts
- Resistance range from 5 ohm to 10K ohm. —
- Low TCR down to ± 15 PPM/ $^{\circ}$ C
- Tight tolerance down to $\pm 0.1\%$

Applications

- Medical Surge Protection.
- Ideal to Replace MELF Resistors
- Measurement Equipment

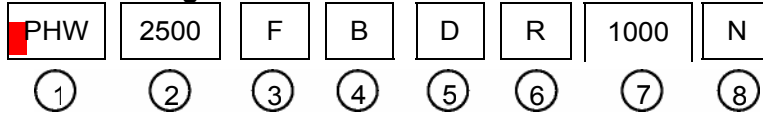
Dimensions



Unit: mm

Type	A	B	C	D	E	F	G	H
PHW2500	28 \pm 0.2	6.35 \pm 0.2	0.5	1.4	25 \pm 0.5	3.3 \pm 0.7	0.55 \pm 0.1	8.5 Max

Part Numbering



Product Type

Product Type
PHW Thin film precision resistors

Dimensions (L x W)

Codes	Dimensions (pitch)
2500	25.00mm

Resistance Tolerance

Codes	Resistance Tolerance
B	$\pm 0.1\%$
C	$\pm 0.25\%$
D	$\pm 0.5\%$
F	$\pm 1\%$

Packaging

Code	Type
B	Bulk

TCR

Codes	Type
B	± 15 PPM/ $^{\circ}$ c
C	± 25 PPM/ $^{\circ}$ c
D	± 50 PPM/ $^{\circ}$ c

Resistance

Codes	Type
-------	------

Power Rating

Code	Type
R	3W
5R00	5 Ω
0100	10 Ω
1000	100 Ω
1002	10K Ω

Marking

Codes	Standard Marking
	No Marking

N

Electrical Characteristics Specifications

Item Type	Power Rating at 70°C	Operating Temp. Range	Max Operating Voltage	Max Overloading Voltage	Resistance Tolerance	Resistance Range	TCR (PPM/°C)
PHW2500	3W	~	200V	400V	±0.10%	5()~1 0K()	+15
					±0.25%		±25
					±0.50%		±50
					±1.00%		

Environmental Characteristics

Item	Specification	Test Method
Short Time Overload	AR±0.5%	JIS-C-5202-5.5 RCWV*2.5 or Max Overloading Voltage, 5 seconds
Dielectric Withstand Voltage	By type	MIL-STD-202F Method 301 Apply Max Overload Voltage for 1 minute
Insulation Resistance	>1000M()	MIL-STD-202F Method 302 Apply 100V _{DC} for 1 minute
Thermal Shock	AR±0.25%	MIL-STD-202F Method 107G -55°C~150°C, 100 cycles
Load Life	AR±0.5%	MIL-STD-202F Method 108A RCWV, 70°C, 1.5 hours ON, 0.5 hours OFF, Total 1000~1048 hours
Humidity (Steady State)	AR±0.3%	MIL-STD-202F Method 103B 40°C, 90~95%RH, RCWV 1.5 hours ON, 0.5 hours OFF, total 1000~1048 hours
Resistance to Dry Heat	AR±0.2%	JIS-C-5202-7.2 96 hours @ +155°C without load
Low Temperature Operation	AR±0.2%	JIS-C-5202-7.1 1 hours, -65°C, followed by 45minutes of RCWV
Bending Strength	AR±0.2%	JIS-C-5202-6.1 .4 Bending Amplitude 3mm for 10 seconds
Solderability	90% min coverage	MIL-STD-202F Method 208H 245°C±5°C, 3±0.5 (sec)
Resistance to Soldering Heat	AR±0.2%	MIL-STD-202F Method 210E 260±5°C, 10±1 seconds

. Storage Temperature :25±3°C; Humidity <80%RH