## PBV, PBH, PSB

## **Precision Current Sensing Resistors**





The PBV, PBH and PSB resistors are designed for mounting to a heat sink.

The PSB utilizes a spring clip. Both the PBV and PBH have one screw mounting capability. Etched Manganin foil and copper terminals provide for low temperature coefficient of resistance, long term stability and low inductance. The internal thermal resistance, <4K/W, assures low self-heating at the 10W rating.

The PBV is a four terminal (Kelvin) version which provides a lower resistance range  $(0.0005\Omega \text{ to } 1\Omega)$  where precision measurement of current is necessary. All are ideal for power electronics and control applications.





## **Technical Data**

Parameters	PBH	PBV	PSB
Resistance Values	2 m $\Omega$ to 100 $\Omega$	0.5 m $\Omega$ to 1 $\Omega$	5 m $\Omega$ to 1 $\Omega$
Tolerance	1.0%, 5.0%	0.5%, 1.0%, 5.0%	1.0%, 5.0%
Temperature Coefficient of Resistance (20°C to 60°C)	< 50 ppm/°C	< 30 ppm/°C	< 50 ppm/°C
Power Rating (Watts)	3/10 on heatsink	3/10 on heatsink	3/10 on heatsink
Dielectric Withstanding Voltage	500 VAC	500 VAC	100 VAC
Inductance	< 20 nH	< 5 nH	<10 nH
Thermal Resistance to Base Plate	Rth < 4°C/W	Rth < 3°C/W	Rth < 4°C/W
Thermal Resistance to Ambient	Rth < 20°C/W	Rth < 15°C/W	Rth < 20°C/W
Operating Temperature Range	-55°C to +125°C	-55°C to +125°C	-55°C to +125°C
Stability (Nominal Load at 70°C)	< 0.5% after 2000 hours	< 0.5% after 2000 hours	< 0.5% after 2000 hours

PBV



PBH



PSB



Dimensions in millimeters

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