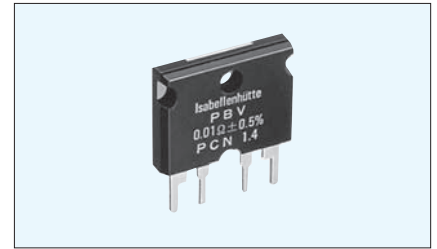


ISA-PLAN LOW-COST SHUNT RESISTORS

PBV

Features :

- Low cost. Small size.
- High power low resistance values and precision.
- Low temperature coefficient. Excellent load life stability.
- Excellent short time over load.
- Ideal for current sensing application.



The real is marked with laser.(picture: ink print)

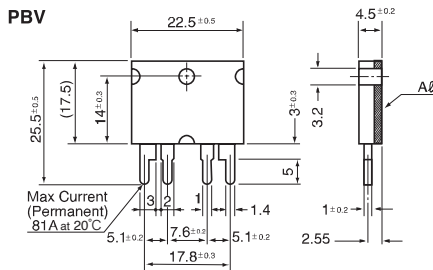
Type	Load Capacity (W)*		Resistance Range (Ω)	Resistance Tolerance (%)	Terminal	Temp. Coefficient (20°C ~ 60°C)	Operating Temp.	Terminal Resistance to Base Plate	Weight (g)
	Heat Sink Mounted	Free Air							
PBV	10	1.5	0.5m~1	±0.5, ±1, ±5	4	±30ppm/°C(R>10mΩ),*2 ±50ppm/°C	-55°C ~ +125°C	3°C/W (6°C/W R<2mΩ)	5

*Referring to power derating curve. Proper measures for heat radiation should be taken.

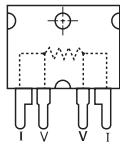


*2 Special TC:±20ppm / °C

Dimensions (mm)

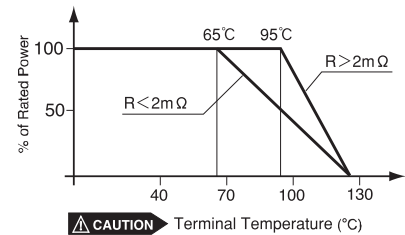


Inner Circuit

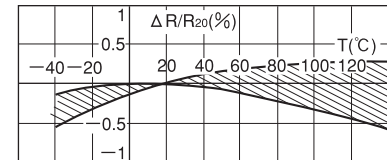


V : Sense Terminal
 I : Current Terminal

Ambient Temp. Derating Curve



Resistance Change Versus Temp.



Performance

Parameters	Test Condition	Specification	Typical Test Data
Thermal Shock	-65°C, 25°C, 125°C, 25°C 25cycles	±0.1%	±0.02%
Over Load	5×Wattage Rating 5sec	±0.2%	±0.01%
Solderability	MIL-STD-202 method 208	>95% Coverage	>99%
Resistance to Solvents	IPA 3min	No Damage	No Damage
Low Temp. Storage and Operation	MIL-R-26E	±0.1%	±0.05%
Terminal Strength	50N 5~10sec	±0.02%	0
Dielectric Withstanding Voltage	AC300V 1min	±0.02%	0
Insulation Resistance	DC100V	100MΩ MIN	10GΩ
Resistance to Soldering Heat	MIL-STD-202 Method 210B	±0.1%	±0.05%
Moisture Resistance	Near 100%RH, +25°C, -10°C 10cycles (10days)	±0.1%	±0.02%
Shock	50g's 11ms	±0.2%	±0.01%
Vibration High Frequency	MIL-STD-202 Method 204D-B	±0.2%	±0.01%
Load Life	Wattage Rating(1.5Hr ON-0.5Hr OFF)2000Hr	±0.2%	±0.02%~0.05%
Storage Life at Elevated Temp	MIL-STD-202 method 108A-F	±0.3%	±0.02%~0.05%
High Temperature Exposure	140°C 2000Hz	±0.5%	±0.2%
Thermal EMF	0°C~100°C	2μV/°C MAX	0.05μV/°C
Frequency Characteristic	Inductance	<50nH	4 nH

How to order

PBV 1mΩ ±0.5%
 Type Resistance Tolerance

● Standard Resistance (Stock)

- PBV : 1 1.5 2 2.2 3.3 4.7 5 6.8 (mΩ) ±0.5%
- 10 15 20 22 33 47 50 68 (mΩ) ±0.5%
- 100 150 220 330 470 680 (mΩ) 1 (Ω) ±0.5%



Assembly Instruction
 Maximum torque for M3 screws : 1N·m



PCN Corporation

Sagamihara Business Office

4-3-17 Sagamihara, Chuo-ku, Sagamihara-shi, Kanagawa-Pref., JAPAN 252-0231
 Phone : 81-42-776-0931 Fax : 81-42-776-0940 E-mail : sales@pcn.co.jp