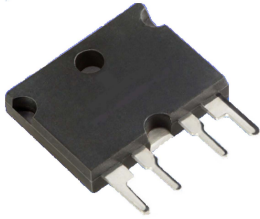


Precision Shunt Resistor



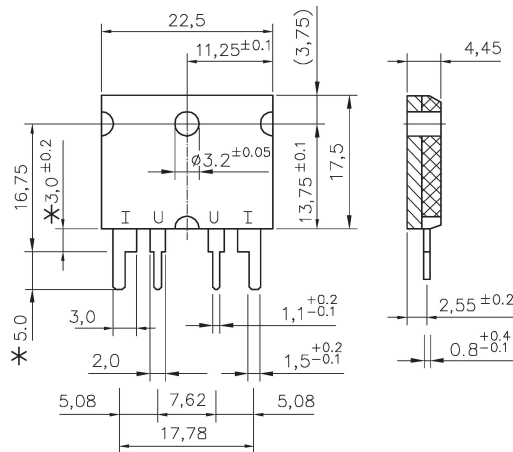
■ Features

- PBA 3W
- PBA 10W with on a heatsink
- Four terminal-connection
- Extremely low TCR value
- Excellent long-term stability and low inductance
- Pulse power rating 1 J for 10 ms

■ Applications

- Current sensors for hybrid power sources
- High current Automotive
- Battery-checking and current measuring equipment

■ Construction



■ Dimensions

Unit: mm

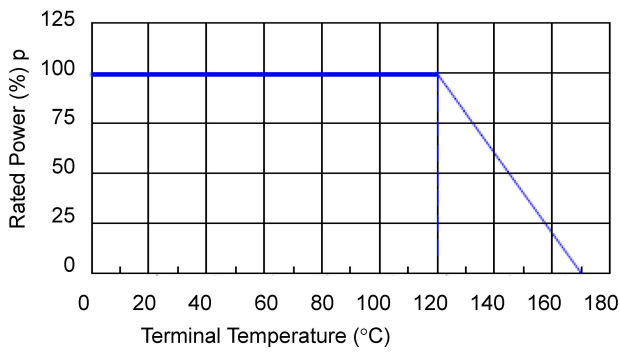
Type	Size	Value	Material	Thickness (t)	Weight (g) (1000pcs)
PBA2217	2217	1mΩ	Manganin	4.45 mm±0.1	320
PBA2217	2217	2mΩ	Manganin	4.45 mm±0.1	320
PBA2217	2217	2.2mΩ	NiCr alloy	4.45 mm±0.1	300
PBA2217	2217	3mΩ	NiCr alloy	4.45 mm±0.1	300
PBA2217	2217	4.7mΩ	NiCr alloy	4.45 mm±0.1	300
PBA2217	2217	5mΩ	Manganin	4.45 mm±0.1	290
PBA2217	2217	10mΩ	Manganin	4.45 mm±0.1	290
PBA2217	2217	20mΩ	NiCr alloy	4.45 mm±0.1	320
PBA2217	2217	50mΩ	NiCr alloy	4.45 mm±0.1	320
PBA2217	2217	100mΩ	NiCr alloy	4.45 mm±0.1	320

Precision Shunt Resistor

Part Numbering

PBA	2217	F	T	D	D	0M50	M
Product Type	Dimensions	Resistance Tolerance	Packaging Code	TCR (PPM/°C)	Power Rating	Resistance	Marking Code
	2217: 22x17	D: ±0.5% F: ±1% J: ±5%	T: Taping Reel B: Bulk	D: ±30	R: 3W E: 10W	0M50: 0.5mΩ R001: 1mΩ R002: 2mΩ R003: 3mΩ R004: 4mΩ	M: Manganin N: NiCr alloy

Derating Curve



Standard Electrical Specifications

Type	Power Rating	Operating Temp. Range	Resistance Range			TCR (PPM/°C) (+20°C ~ +60°C)
			±0.5%	±1%	±5%	
PBA2217	3W	-55°C ~ +170°C	1mΩ			±30
PBA2217	3W		2mΩ			±30
PBA2217	3W		2.2mΩ			±30
PBA2217	3W		3mΩ			±30
PBA2217	3W		4.7mΩ			±30
PBA2217	3W		5mΩ			±30
PBA2217	3W		10mΩ			±30
PBA2217	3W		20mΩ			±30
PBA2217	3W		50mΩ			±30
PBA2217	3W		100mΩ			±30

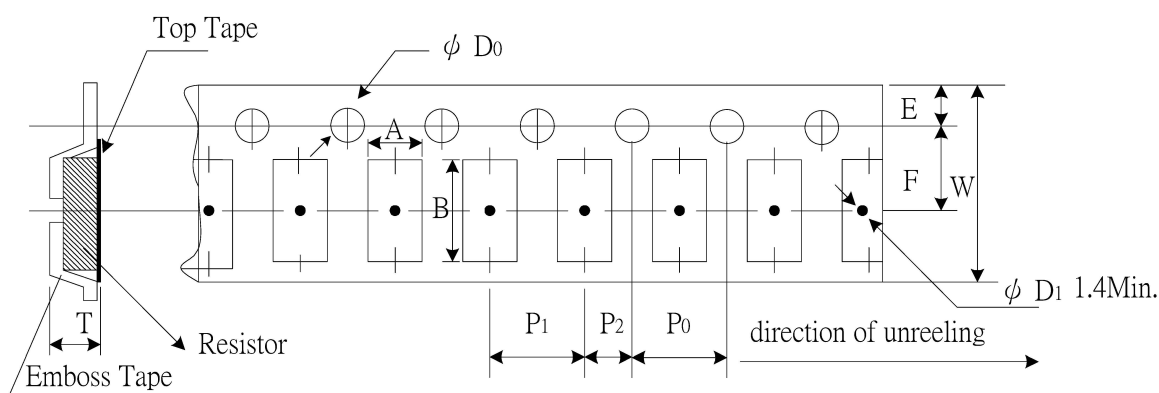
Environmental Characteristics

Item	Requirement	Test Method
Short time overload	±0.2%	Rated Power × 5 for 5 seconds
Load Life	±1.0%	90 min. "ON", 30 min. "OFF" for 2000 hours
Resistance to Soldering Heat	±0.5%	260°C for 10 min.
Thermal Shock	±0.1%	-65°C, 25°C, 125°C, 25°C, 25 cycles
Moisture Resistance	±0.2%	90 ~ 98%RH, +25°C, +65°C, -10°C, 10 cycles
High Temperature Exposure	±0.5%	140°C for 250 hours

■ **Storage Temperature: 15~28°C; Humidity < 80%RH**

Packaging

Emboss Plastic Tape Specifications



Unit: mm

Type	A	B	W	E	F	P ₀	P ₁	P ₂	ØD ₀	T	Quantity (EA)
PBA2217	5.7	11.2	16	1.75	7.5	4	12	6	1.50	1.2	1000
PBA2217	8.2	16.1	24	1.75	11.5	4	12	6	1.50	1.9	500