Precision Moulded Wirewound Resistors

(BWW) Precision Wirewound Power Resistors Operate in Harsh Environments

Preview

The new BWW series moulded axial leaded wirewound resistors from Token use high-purity alumina ceramic cores with wire winding which are spot welded by precision CNC machine tools to ensure total operational consistency throughout.

Also, using advanced encapsulation die/mould technologies, this precision power resistors are encapsulated with epoxy molding compound.

The BWW models possess a wide resistance value from 0.1Ω to 39KΩ and meets the stringent requirements of MIL-R-93. Ayrton Perry noninductive windings are available on request. The BWW precision version has low ohmic values for current sensing applications.

All versions are miniaturised for better power to dimension ratios and are available in 0.5W to 10W rated power at 25°C. Tolerance is available in ±0.1%, ±0.25%, ±0.5%, ±1% and ±2% with TCR ±25PPM/°C, ±50PPM/°C and ±150PPM/°C which makes them ideally suited for use in precision applications.

The BWW series is RoHS compliant with 100% Sn (lead free) coated terminals. To address your need for technical and economic success in a timely manner, our custom solutions are the best option. Contact us with your specific needs.

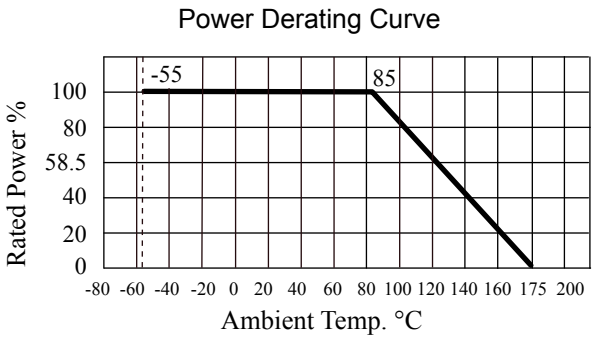
Features

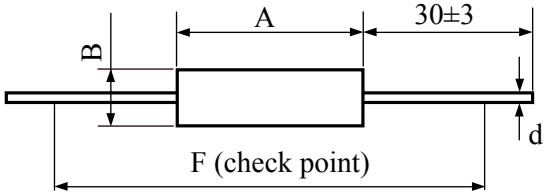
- Axial Moulded
- Excellent load life stability
- Insulation, Moisture Proof
- High Precision and reliability
- Meets the Standards of MIL-R-93
- RoHS compliant with 100% lead free

Applications

- Electrical loads, Filament dropping
- DC/DC converters, AC/DC inverters
- High-voltage bleeders, Dynamic braking
- Capacitor charging/discharging regulation
- Motor speed controls, Voltage divider networks
- Bias supply, Current shunts, Voltage dropping, Crow-bar circuits

Technical Specifcations





Type	RateWatts at 25°C (W)	Resistance Range (Ω)		Tolerance (%)	TCR (PPM/°C)	Dimensions (mm)			
		Min	Max			A±0.25	ΦB±0.25	Φd	F
BWW-0.5	0.5	0.1	100	±0.1 ±0.25 ±0.5 ±1 ±2	±25 ±50 ±150	7.0	3.0	0.8	27.0
BWW-1	1.0	0.1	1K			11.0	3.0	0.8	31.0
BWW-3	3.0	0.1	10K			15.0	5.2	0.8	34.0
BWW-4	4.0	0.1	15K			18.0	6.5	0.8	38.0
BWW-5	5.0	1	24K			24.0	8.4	1.0	44.0
BWW-10	10.0	1	39K			46.5	10.0	1.0	66.0

Performance

Test Items	Test Conditions	Specifications
Operating Temp. Range		-55°C ~ 175°C
Insulation Resistance	500V	>1GΩ
Dielectric Withstanding Voltage	500V AC 1 Min.	ΔR ≤ ±0.1%R
Load Life	70°C on~off cycle 1000 Hrs.	ΔR ≤ ±1%R
Moisture-Proof Load Life	40°C 95% RH on~off cycle 21 Hrs.	ΔR ≤ ±0.2%R
Resistance to soldering heat	350°C, 3.5s	ΔR ≤ ±0.1%R
Solderability	235±5°C, 5s(solder bath method)	IEC68-2-20(1968)

Application Notes

Precision Wire-wound Resistors Application Notes:

● When being used in AC circuits, some wirewound structures give inductance ingredients or parasitic capacity, so they may cause unusual phenomena such as oscillations etc. Quorum deviations of other components should be carefully taken into account for use.

● Application and Placement: Wire wound resistors use different gauges of wire as resistance elements. Sometimes the gauge is extremely thin (finer than a strand of human hair) and very susceptible to breakage in environments containing salts, ash, dust and corrosives. Avoid utilization in such environments.

● Do not install in dusty areas because the accumulation will cause shorts and poor conductance.

How to Order

BWW	1W	100R	F	D	P
❶	❷	❸	❹	❺	❻

❶ Part Number: BWW

❷ Rated Power (W)

❸ Resistance Value (Ω)

Code	Resistance Value (Ω)
OR1	0.1 Ω
100R	100Ω
1K	1000Ω

❹ Resistance Tolerance (%)

Code	Resistance Tolerance
B	±0.1%
C	±0.25%
D	±0.5%
F	±1%
G	±2%

❺ TCR (PPM/°C)

Code	TCR
C	±25PPM/°C
D	±50PPM/°C
K	±150PPM/°C

❻ Package

Code	Package
P	Bulk

Back to 1st Page - Precision Wirewound Resistors (BWW)