

Features:

- Flameproof inorganic construction
- High temperature potting compound
- Non-inductive available up to 50Ω
- RoHS compliant, REACH compliant, lead free, and halogen free

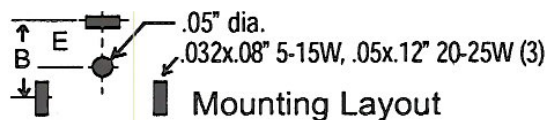
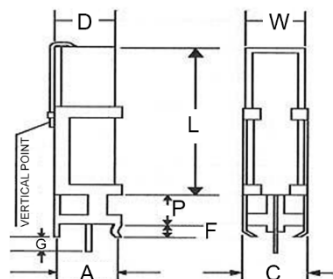


Electrical Specifications

Type/Code	Power Rating (W) @ 70°C	Max Working Voltage (V)	TCR (ppm/°C)	Ohmic Range (Ω) and Tolerance	
				Wirewound 5%	Metal Oxide 5%
BVM5	5	350	± 300	0.1 ≤ 200	>200 - 50K
BVM7	7	500	± 300	0.1 ≤ 300	>300 - 50K
BVM10	10	500	± 300	0.1 ≤ 500	>500 - 50K
BVM15	15	540	± 300	0.1 ≤ 680	>680 - 50K
BVM20	20	600	± 300	0.1 ≤ 820	>820 - 50K
BVM25	25	600	± 300	0.1 ≤ 820	>820 - 15K

Maximum Working voltage is limited by $\sqrt{P \cdot R}$

Mechanical Specifications



Type/Code	A	C	F	G	B	Unit
BVM5	0.433 ± 0.039 11.00 ± 1.00	0.433 ± 0.039 11.00 ± 1.00	0.157 ± 0.024 4.00 ± 0.60	0.197 ± 0.118 5.00 ± 3.00	0.394 ± 0.039 10.00 ± 1.00	inches mm
BVM7	0.433 ± 0.039 11.00 ± 1.00	0.433 ± 0.039 11.00 ± 1.00	0.157 ± 0.024 4.00 ± 0.60	0.197 ± 0.118 5.00 ± 3.00	0.394 ± 0.039 10.00 ± 1.00	inches mm
BVM10	0.433 ± 0.039 11.00 ± 1.00	0.433 ± 0.039 11.00 ± 1.00	0.157 ± 0.024 4.00 ± 0.60	0.197 ± 0.118 5.00 ± 3.00	0.394 ± 0.039 10.00 ± 1.00	inches mm
BVM15	0.571 ± 0.039 14.50 ± 1.00	0.571 ± 0.039 14.50 ± 1.00	0.157 ± 0.024 4.00 ± 0.60	0.197 ± 0.118 5.00 ± 3.00	0.500 ± 0.039 12.70 ± 1.00	inches mm
BVM20	0.591 ± 0.039 15.00 ± 1.00	0.591 ± 0.039 15.00 ± 1.00	0.157 ± 0.024 4.00 ± 0.60	0.197 ± 0.118 5.00 ± 3.00	0.500 ± 0.039 12.70 ± 1.00	inches mm
BVM25	0.591 ± 0.039 15.00 ± 1.00	0.591 ± 0.039 15.00 ± 1.00	0.157 ± 0.024 4.00 ± 0.60	0.197 ± 0.118 5.00 ± 3.00	0.500 ± 0.039 12.70 ± 1.00	inches mm

Mechanical Specifications (cont.)

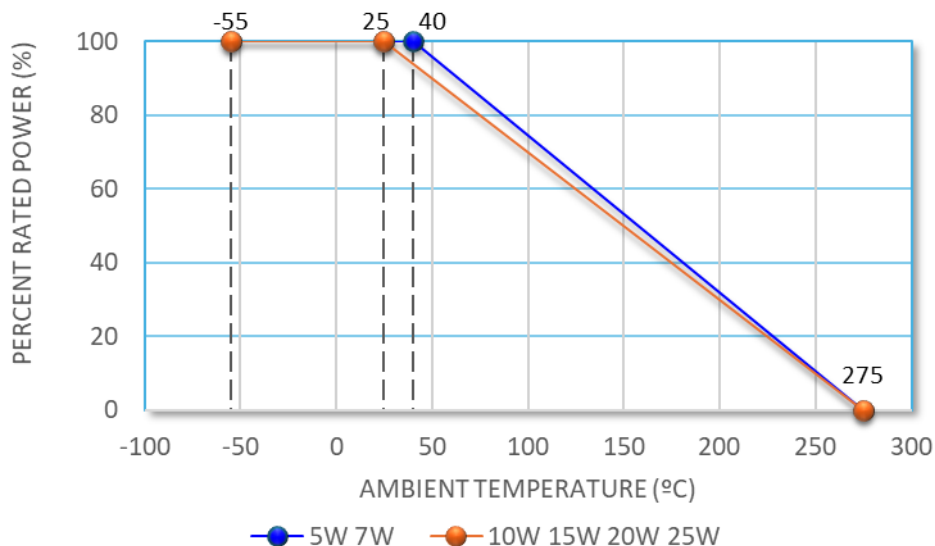
Type/Code	E	D	L	P	W	Unit
BVM5	0.197 ± 0.059 5.00 ± 1.50	0.354 ± 0.039 9.00 ± 1.00	0.866 ± 0.039 22.00 ± 1.00	0.197 ± 0.079 5.00 ± 2.00	0.394 ± 0.079 10.00 ± 2.00	inches mm
BVM7	0.197 ± 0.059 5.00 ± 1.50	0.354 ± 0.039 9.00 ± 1.00	1.378 ± 0.039 35.00 ± 1.00	0.394 ± 0.079 10.00 ± 2.00	0.394 ± 0.079 10.00 ± 2.00	inches mm
BVM10	0.197 ± 0.059 5.00 ± 1.50	0.354 ± 0.039 9.00 ± 1.00	1.890 ± 0.039 48.00 ± 1.00	0.394 ± 0.079 10.00 ± 2.00	0.394 ± 0.079 10.00 ± 2.00	inches mm
BVM15	0.264 ± 0.059 6.70 ± 1.50	0.492 ± 0.039 12.50 ± 1.00	1.929 ± 0.039 49.00 ± 1.00	0.394 ± 0.079 10.00 ± 2.00	0.492 ± 0.079 12.50 ± 2.00	inches mm
BVM20	0.276 ± 0.059 7.00 ± 1.50	0.512 ± 0.039 13.00 ± 1.00	2.362 ± 0.039 60.00 ± 1.00	0.394 ± 0.079 10.00 ± 2.00	0.512 ± 0.079 13.00 ± 2.00	inches mm
BVM25	0.276 ± 0.059 7.00 ± 1.50	0.512 ± 0.039 13.00 ± 1.00	2.362 ± 0.039 60.00 ± 1.00	0.394 ± 0.079 10.00 ± 2.00	0.512 ± 0.079 13.00 ± 2.00	inches mm

Performance Characteristics

Test	Test Specification
Moisture Resistance	± 5%
Thermal Shock	± 2%
Load Life @ 70°C - 1000 hours	± 5%
Resistance to Soldering Heat	± 2%
Short Time Overload - 5 x Pn for 5 seconds	± 2%
Dielectric Withstanding Voltage	± 2%

Operating temperature range is -55 to +275°C

Power Derating Curve:



Recommended Solder Profile

This information is intended as a reference for solder profiles for Stackpole resistive components. These profiles should be compatible with most soldering processes. These are only recommendations. Actual numbers will depend on board density, geometry, packages used, etc., especially those cells labeled with “**”.

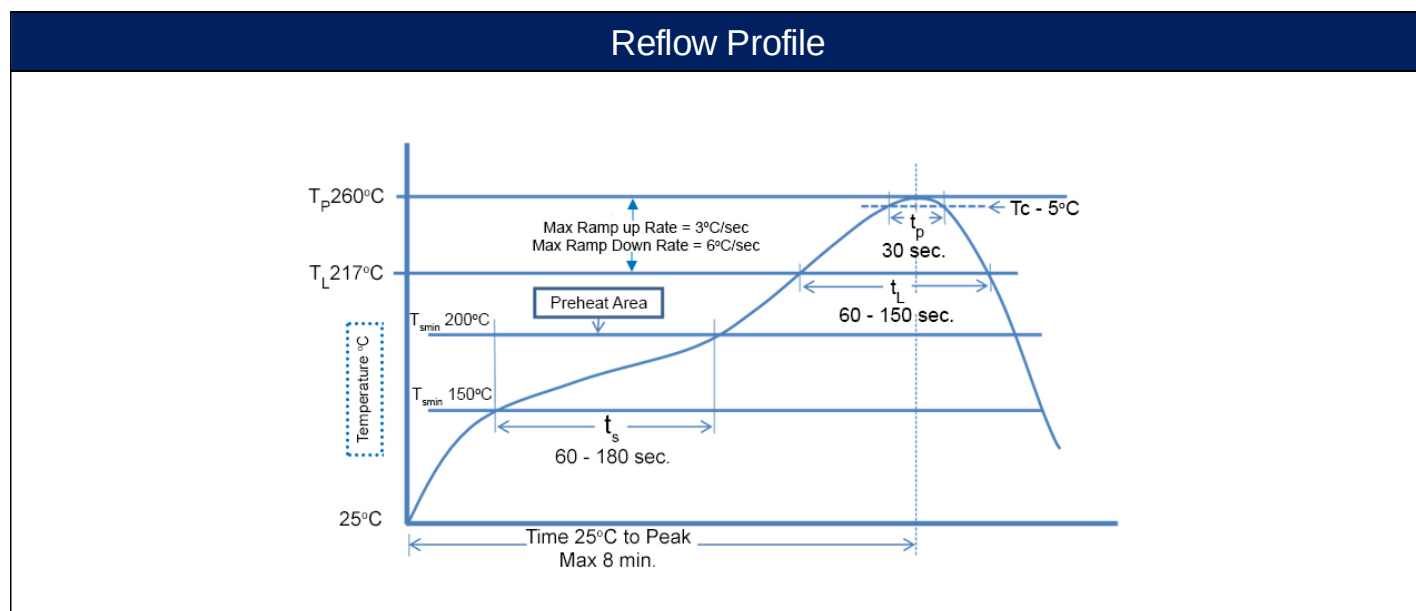
100% Matte Tin / RoHS Compliant Terminations

Soldering iron recommended temperatures: 330°C to 350°C with minimum duration.
Maximum number of reflow cycles: 3.

Wave Soldering			
Description	Maximum	Recommended	Minimum
Preheat Time	80 seconds	70 seconds	60 seconds
Temperature Diff.	140°C	120°C	100°C
Solder Temp.	260°C	250°C	240°C
Dwell Time at Max.	10 seconds	5 seconds	*
Ramp DN (°C/sec)	N/A	N/A	N/A

Temperature Diff. = Difference between final preheat stage and soldering stage.

Convection IR Reflow			
Description	Maximum	Recommended	Minimum
Ramp Up (°C/sec)	3°C/sec	2°C/sec	*
Dwell Time > 217°C	150 seconds	90 seconds	60 seconds
Solder Temp.	260°C	245°C	*
Dwell Time at Max.	30 seconds	15 seconds	10 seconds
Ramp DN (°C/sec)	6°C/sec	3°C/sec	*



RoHS Compliance

Stackpole Electronics has joined the worldwide effort to reduce the amount of lead in electronic components and to meet the various regulatory requirements now prevalent, such as the European Union's directive regarding "Restrictions on Hazardous Substances" (RoHS 3). As part of this ongoing program, we periodically update this document with the status regarding the availability of our compliant components. All our standard part numbers are compliant to EU Directive 2011/65/EU of the European Parliament as amended by Directive (EU) 2015/863/EU as regards the list of restricted substances.

RoHS Compliance Status						
Standard Product Series	Description	Package / Termination Type	Standard Series RoHS Compliant	Lead-Free Termination Composition	Lead-Free Mfg. Effective Date (Std Product Series)	Lead-Free Effective Date Code (YY/WW)
BVM	Ceramic Housed Vertical Wirewound Bracket Mount Resistor	Special	YES	100% Matte Sn	Always	Always

"Conflict Metals" Commitment

We at Stackpole Electronics, Inc. are joined with our industry in opposing the use of metals mined in the "conflict region" of the eastern Democratic Republic of the Congo (DRC) in our products. Recognizing that the supply chain for metals used in the electronics industry is very complex, we work closely with our own suppliers to verify to the extent possible that the materials and products we supply do not contain metals sourced from this conflict region. As such, we are in compliance with the requirements of Dodd-Frank Act regarding Conflict Minerals.

Compliance to "REACH"

We certify that all passive components supplied by Stackpole Electronics, Inc. are SVHC (Substances of Very High Concern) free and compliant with the requirements of EU Directive 1907/2006/EC, "The Registration, Evaluation, Authorization and Restriction of Chemicals", otherwise referred to as REACH. Contact us for complete list of REACH Substance Candidate List.

Environmental Policy

It is the policy of Stackpole Electronics, Inc. (SEI) to protect the environment in all localities in which we operate. We continually strive to improve our effect on the environment. We observe all applicable laws and regulations regarding the protection of our environment and all requests related to the environment to which we have agreed. We are committed to the prevention of all forms of pollution.

How to Order

