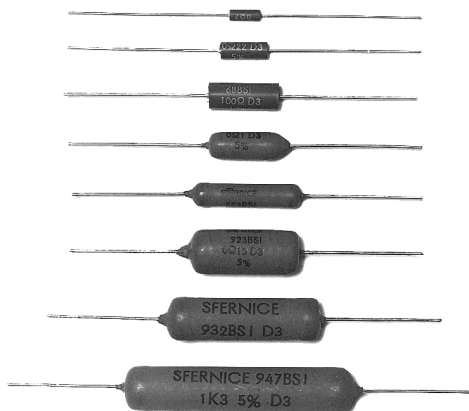


Molded and Insulated Wirewound Power Resistors Axial Leads



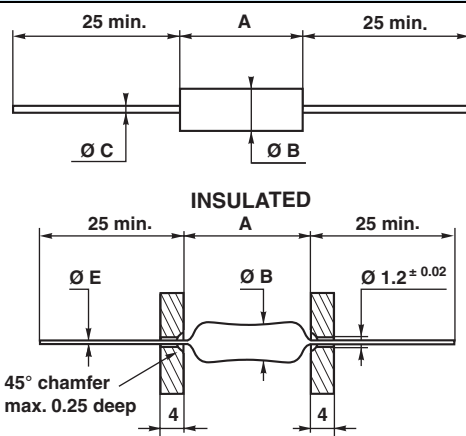
FEATURES

- 1 W to 10 W
- Excellent stability = Typical drift $\pm 1\%$ after 2000 h
- High power = Up to 10 W (25 °C)
- Low ohmic values = 0.01 Ω available
- Electrical insulation
- Climatic protection
- Compliant to RoHS directive 2002/95/EC



RoHS
COMPLIANT

DIMENSIONS in millimeters



MOLDED	PROTECTION			
	SERIES AND STYLE	A	Ø B	Ø C ± 0.1
58BSI	6.5 \pm 0.2	2.4 \pm 0.1	0.6	0.3
63BSI	10 \pm 0.2	3.7 \pm 0.1		
68BSI	15 \pm 0.5	5.6 \pm 0.2	0.8	1.3
INSULATED	PROTECTION			
516BSI	17 \pm 2	5 \pm 1	0.8	1.6
523BSI	24 \pm 2	5 \pm 1		2.5
923BSI	26 \pm 2	9 \pm 1		6
932BSI	34 \pm 3	9 \pm 1		7.5
947BSI	51 \pm 3	9 \pm 1		10

TECHNICAL SPECIFICATIONS

VISHAY SFERNICE SERIES	58BSI	63BSI	68BSI	516BSI	523BSI	923BSI	932BSI	947BSI
Power Rating at + 25 °C	1 W	2 W	3 W	4 W	5 W	6 W	8 W	10 W
Ohmic Range	0.1 Ω to 2 k Ω	0.025 Ω to 4 k Ω	0.01 Ω to 15 k Ω	0.01 Ω to 20 k Ω	0.015 Ω to 40 k Ω	0.02 Ω to 60 k Ω	0.035 Ω to 100 k Ω	0.06 Ω to 150 k Ω
Ohmic Range in Relation to ± 100 ppm/°C	$\pm 0.5\%$ $\pm 5\%$	0.1 Ω 4 k Ω	0.1 Ω 15 k Ω	0.1 Ω 20 k Ω	0.1 Ω 40 k Ω	0.1 Ω 60 k Ω	0.1 Ω 100 k Ω	0.1 Ω 150 k Ω
Temperature Coefficient ± 300 ppm/°C	$\pm 1\%$ $\pm 5\%$	- 0.025 Ω < 0.1 Ω	0.01 Ω < 0.1 Ω	0.01 Ω < 0.1 Ω	0.015 Ω < 0.1 Ω	0.02 Ω < 0.1 Ω	0.035 Ω < 0.1 Ω	0.06 Ω < 0.1 Ω
Limiting Element Voltage	50 V	120 V	200 V	200 V	250 V	300 V	500 V	750 V



Molded and Insulated Wirewound Power Resistors
Axial Leads

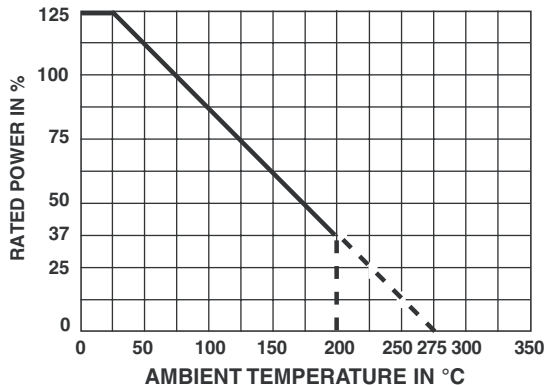
Vishay Sfernice

MECHANICAL SPECIFICATIONS	
Mechanical Protection	Molded or painted (insulated)
Resistive Element	CuNi or CrNi
Substrate	Alumina
Connections	Sn/Ag/Cu 99/0.3/0.7

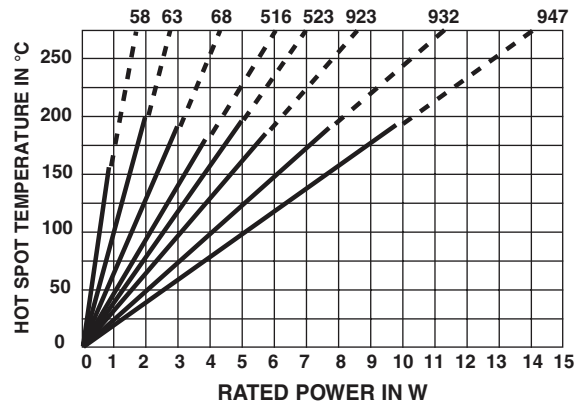
ENVIRONMENTAL SPECIFICATIONS	
Temperature Range	- 55 °C to + 275 °C
Climatic Category	55/200/56

PERFORMANCE			
TESTS	CONDITIONS	REQUIREMENTS	TYPICAL VALUES AND DRIFTS
Dielectric Strength	IEC 60115-1 1000 V _{RMS} for 923...947 500 V _{RMS} for 58...523	± (0.1 % + 0.05 Ω)	± (0.1 % + 0.05 Ω)
Short Time Overload	IEC 60115-1 5 P _r /5 s for P _r < 5 W 10 P _r /5 s for P _r ≥ 5 W	± (0.2 % + 0.05 Ω)	± (0.1 % + 0.05 Ω)
Endurance	IEC 60115-1 90'/30' P _r at 25 °C, 2000 h	± (1 % + 0.05 Ω)	± (1 % + 0.05 Ω)
Endurance at High Temperature	250 h at 275 °C	± (0.5 % + 0.05 Ω)	± (0.3 % + 0.05 Ω)
Thermal Shock	Load at 100 % P _r followed by cold temp. exposure at - 55 °C	± (0.2 % + 0.05 Ω)	± (0.1 % + 0.05 Ω)
Climatic Sequence	IEC 60115-1 - 55 °C/+ 200 °C 5 cycles	± (0.5 % + 0.05 Ω) Insulation resistance ≥ 100 MΩ	± (0.3 % + 0.05 Ω) Insulation resistance > 10 GΩ
Damp Heat, Steady State	IEC 60115-1/IEC 60068-2-78 56 days, 40 °C, 93 % RH	± (0.5 % + 0.05 Ω) Insulation resistance ≥ 100 MΩ	± (0.3 % + 0.05 Ω) Insulation resistance > 10 GΩ
Moisture Resistance	MIL-STD-202 Method 106	± (0.2 % + 0.05 Ω) Insulation resistance > 100 MΩ	± (13 % + 0.05 Ω) Insulation resistance > 10 GΩ
Shock	MIL-STD-202 100 g Method 205 - Test C	± (0.1 % + 0.05 Ω)	± (0.05 % + 0.05 Ω)
Vibration	MIL-STD-202 Method 204 - Test D: 20 g 10Hz/2000 Hz	± (0.1 % + 0.05 Ω)	± (0.05 % + 0.05 Ω)

POWER RATING



TEMPERATURE RISE



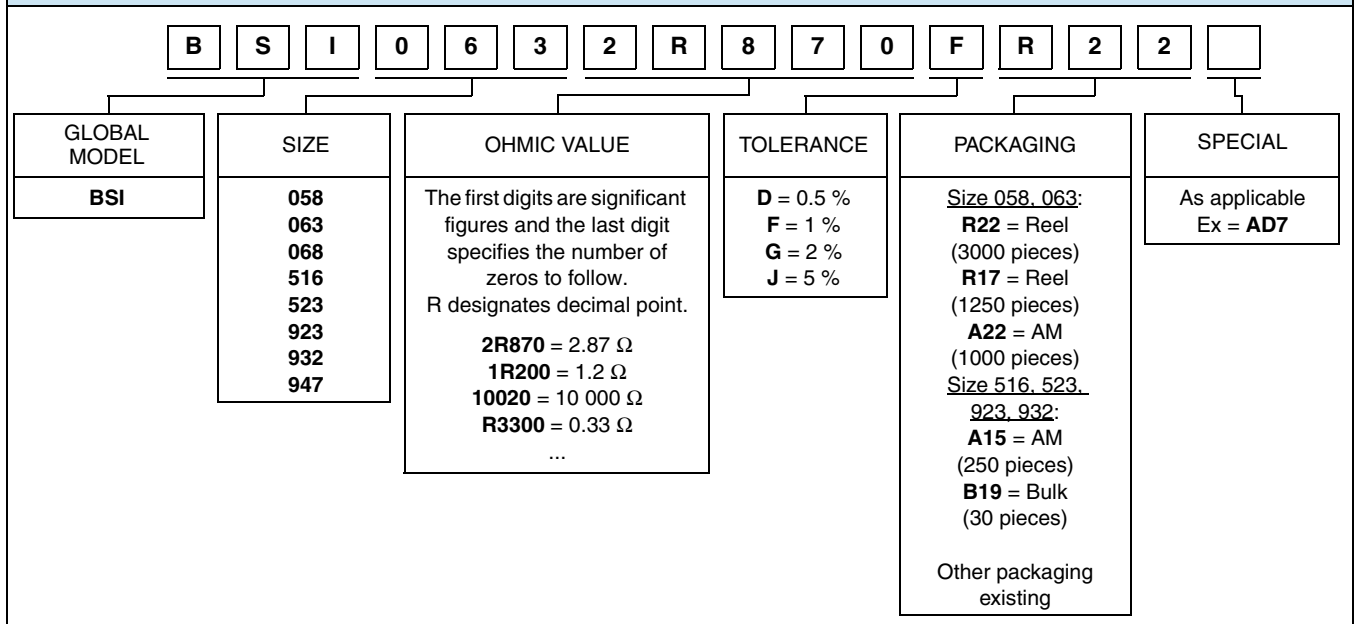
MARKING

GEKA trademark, model, style, nominal resistance (in Ω), tolerance (in %), manufacturing date.
Because of lack of space, small styles are marked with ohmic value (in Ω), and tolerance (in %) only.

ORDERING INFORMATION

BSI	63	U22	2 %	± 100 ppm/°C	TR300	e1
MODEL	STYLE	OHMIC VALUE	TOLERANCE	TEMPERATURE COEFFICIENT	PACKAGING	LEAD (Pb)-FREE

GLOBAL PART NUMBER INFORMATION





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