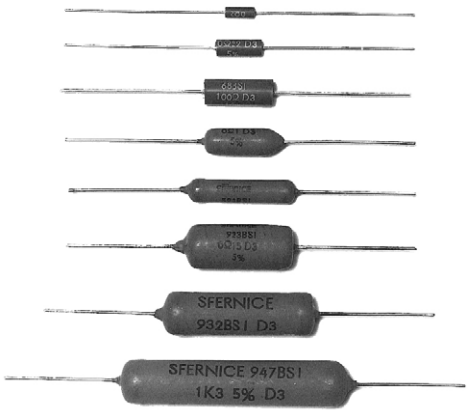
Molded Wirewound Power Resistors Axial Leads

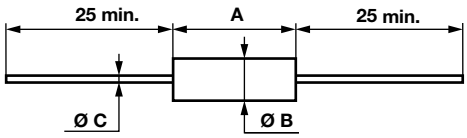


FEATURES

- 2 W
- Excellent stability = typical drift ± 1 % after 2000 h
- Low ohmic values = 0.025 Ω available
- Electrical insulation
- Climatic protection
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

RoHS COMPLIANT

DIMENSIONS in millimeters



MODEL	PROTECTION			
	A	Ø B	Ø C ± 0.1	WEIGHT (g)
63BSI	10 ± 0.2	3.7 ± 0.1	0.6	0.45

STANDARD ELECTRICAL SPECIFICATIONS

MODEL	SIZE	RESISTANCE RANGE Ω	RATED POWER $P_{25\,°C}$ W	LIMITING ELEMENT VOLTAGE V	TOLERANCE ± %	TEMPERATURE COEFFICIENT ± ppm/°C
63BSI	063	0.025 to 4K	2	120	0.5, 1, 2, 5	100, 300

TECHNICAL SPECIFICATIONS

VISHAY SFERNICE SERIES			63BSI
Ohmic range in relation to	± 100 ppm/°C	± 0.5 % ± 5 %	0.1 Ω 4 kΩ
Temperature coefficient	± 300 ppm/°C	± 1 % ± 5 %	0.025 Ω < 0.1 Ω

MECHANICAL SPECIFICATIONS

Mechanical Protection	Molded
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

For technical questions, contact: sferfixedresistors@vishay.com

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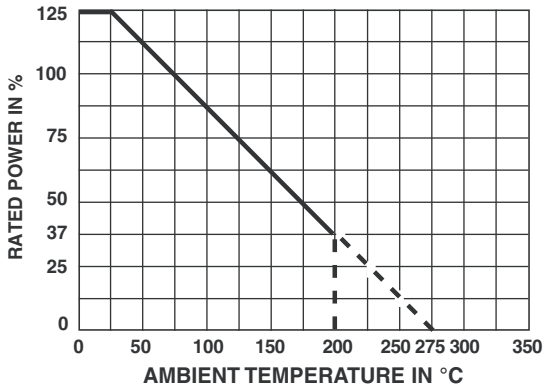
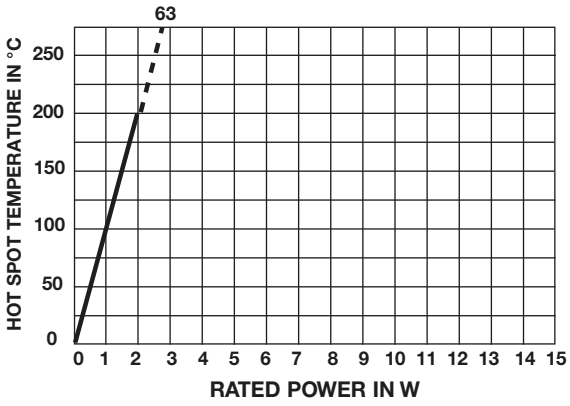
PERFORMANCE			
TESTS	**CONDITIONS**	**REQUIREMENTS**	**TYPICAL VALUES AND DRIFTS**
Dielectric Strength	IEC 60115-1 1000 V_{RMS} for 923 to 947 500 V_{RMS} for 58 to 523	± (0.1 % + 0.05 Ω)	± (0.1 % + 0.05 Ω)
Short Time Overload	IEC 60115-1 5 P_n / 5 s for P_r < 5 W 10 P_n / 5 s for P_r ≥ 5 W	± (0.2 % + 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)	± (0.1 % + 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

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GLOBAL PART NUMBER INFORMATION

B	S	I	0	6	3	2	R	8	7	0	F	R	2	2	

GLOBAL MODEL	SIZE	OHMIC VALUE	TOLERANCE	PACKAGING	SPECIAL
BSI	**063**	The first digits are significant figures and the last digit specifies the number of zeros to follow. R designates decimal point. **2R870** = 2.87 Ω **1R200** = 1.2 Ω **10001** = 10 000 Ω **R3300** = 0.33 Ω ...	**D** = 0.5 % **F** = 1 % **G** = 2 % **J** = 5 %	Size 058: **R26** = reel (5000 pieces) size 063: **R22** = reel (3000 pieces) size 68, 516, 523: **R17** = reel (1250 pieces) size 923, 932, 947: **B19** = box (30 pieces) Other packaging existing	As applicable Ex = **BP1**

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