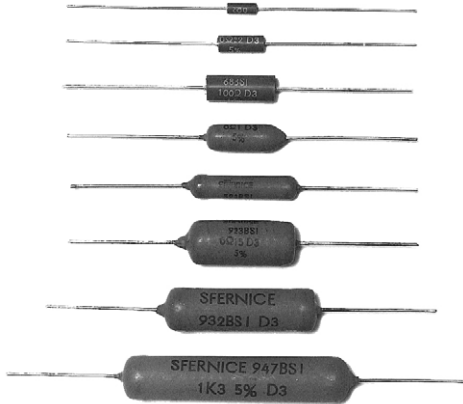


## Molded Wirewound Power Resistors Axial Leads

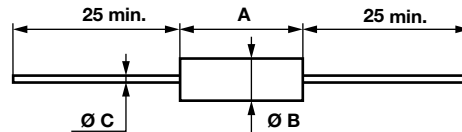


### FEATURES

- 2 W
- Excellent stability = typical drift  $\pm 1\%$  after 2000 h
- Low ohmic values =  $0.025\ \Omega$  available
- Electrical insulation
- Climatic protection
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)


**RoHS**  
COMPLIANT

### DIMENSIONS in millimeters



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

### STANDARD ELECTRICAL SPECIFICATIONS

MODEL	SIZE	RESISTANCE RANGE $\Omega$	RATED POWER $P_{25\ ^\circ\text{C}}$ W	LIMITING ELEMENT VOLTAGE V	TOLERANCE $\pm \%$	TEMPERATURE COEFFICIENT $\pm \text{ppm}/^\circ\text{C}$
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	$\pm 100\ \text{ppm}/^\circ\text{C}$	$\pm 0.5\%$ $\pm 5\%$	0.1 $\Omega$ 4 k $\Omega$
Temperature coefficient	$\pm 300\ \text{ppm}/^\circ\text{C}$	$\pm 1\%$ $\pm 5\%$	0.025 $\Omega$ < 0.1 $\Omega$

### MECHANICAL SPECIFICATIONS

Mechanical Protection	Molded
Resistive Element	CuNi or CrNi
Substrate	Alumina
Connections	Sn/Ag/Cu 99/0.3/0.7

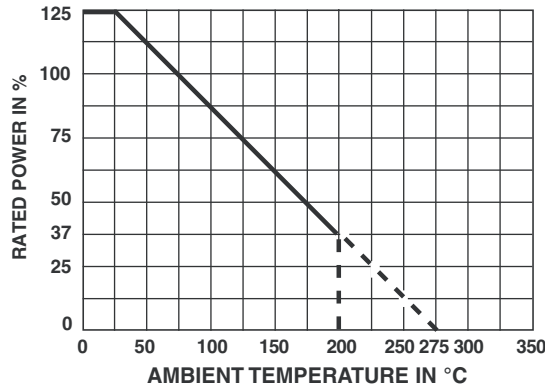
### ENVIRONMENTAL SPECIFICATIONS

Temperature Range	-55 $^\circ\text{C}$ to +275 $^\circ\text{C}$
Climatic Category	55/200/56

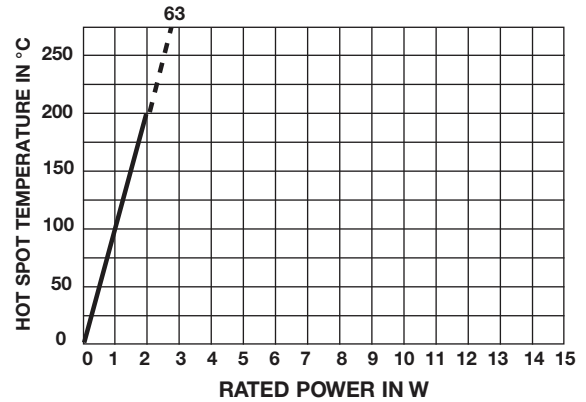


PERFORMANCE			
TESTS	CONDITIONS	REQUIREMENTS	TYPICAL VALUES AND DRIFTS
Dielectric Strength	IEC 60115-1 1000 V <sub>RMS</sub> for 923 to 947 500 V <sub>RMS</sub> for 58 to 523	± (0.1 % + 0.05 Ω)	± (0.1 % + 0.05 Ω)
Short Time Overload	IEC 60115-1 5 P <sub>n</sub> / 5 s for P <sub>r</sub> < 5 W 10 P <sub>n</sub> / 5 s for P <sub>r</sub> ≥ 5 W	± (0.2 % + 0.05 Ω)	± (0.1 % + 0.05 Ω)
Endurance	IEC 60115-1 90' / 30' P <sub>r</sub> 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 <sub>r</sub> 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**

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

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



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