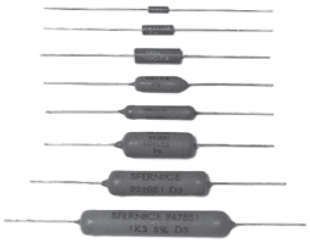
Moulded and Insulated Wirewound Precision Power Resistors Axial Leads



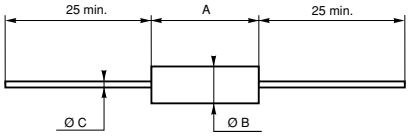
FEATURES

- 1 Watt to 10 Watt
- NF C 83-210
- GAM T1 LNZ
- Excellent stability
- High power
- Low ohmic values
- Electrical insulation
- Climatic protection

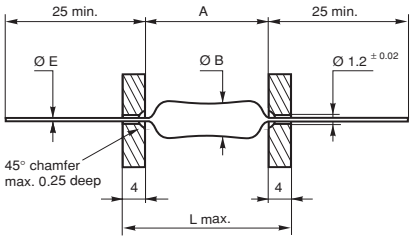
BSI style resistors comply with the most stringent requirements of the NF C 83-210 and MIL-R-26 E specifications. 8 styles covering the power range from 1 W to 10 W

DIMENSIONS in millimeters

MOLDED



INSULATED



DIMENSIONS in millimeters								
PROTECTION	MOLDED			INSULATED				
Dim. \ Style	58 BSI	63 BSI	68 BSI	516 BSI	523 BSI	923 BSI	932 BSI	947 BSI
A	6.5 ± 0.2	10 ± 0.2	15 ± 0.5	16 ± 2	23 ± 2	23 ± 2	32 ± 2	47 ± 2
Ø B	2.4 ± 0.1	3.7 ± 0.1	5.6 ± 0.2	5 ± 1	5 ± 1	9 ± 1	9 ± 1	9 ± 1
Ø C ± 0.1	0.6			0.8				
Weight in g	0.3	0.45	1.3	1.6	2.5	6	7.5	10

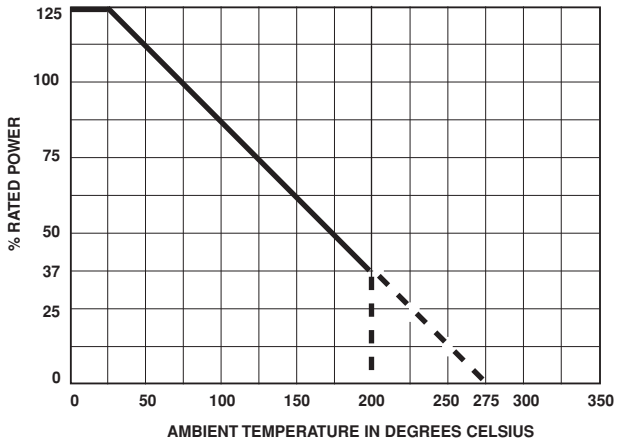
TECHNICAL SPECIFICATIONS

VISHAY SFERNICE MODEL AND STYLE				58 BSI	63 BSI	68 BSI	516 BSI	523 BSI	923 BSI	932 BSI	947 BSI
NF C 83-210 Conformity				RP 8	RP 7	RP 4	–	–	RP 5	–	RP 6
MIL-R-26 E Conformity				RW 81	RW 80	RW 79	–	–	RW 74	–	RW 78
LNZ				yes	yes	yes	–	–	yes	–	yes
GAM-T-1				yes	yes	yes	–	–	yes	–	yes
Power Rating at + 25°C				1W	2W	3W	4W	5W	6W	8W	10W
Ohmic Range				0.1Ω 2kΩ	0.025Ω 4kΩ	0.01Ω 15kΩ	0.01Ω 20kΩ	0.015Ω 40kΩ	0.02Ω 60kΩ	0.035Ω 100kΩ	0.06Ω 150kΩ
Ohmic Range in Relation to	± 100ppm/°C	to	± 0.25% ± 5%	0.1Ω 2kΩ	0.1Ω 4kΩ	0.1Ω 15kΩ	0.1Ω 20kΩ	0.1Ω 40kΩ	0.1Ω 60kΩ	0.1Ω 100kΩ	0.1Ω 150kΩ
Temperature Coefficient	± 300ppm/°C	to	± 1% ± 5%	–	0.025Ω < 0.1Ω	0.01Ω <0.1Ω	0.01Ω < 0.1Ω	0.015Ω < 0.1Ω	0.02Ω < 0.1Ω	0.035Ω < 0.1Ω	0.06Ω < 0.1Ω
Limiting Element Voltage				50V	120V	200V	200V	250V	300V	500V	750 V

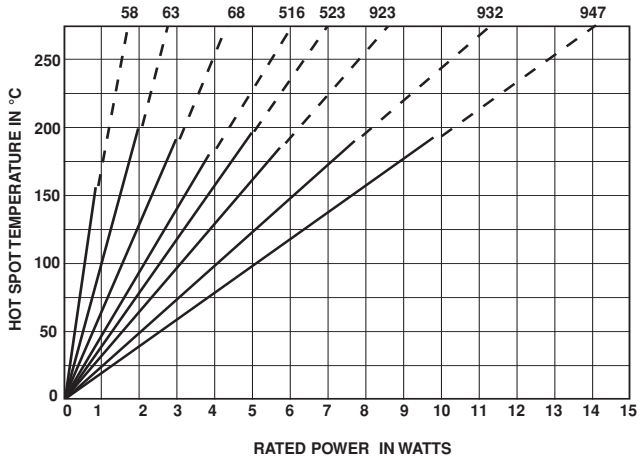
PERFORMANCE

TESTS	CONDITIONS	REQUIREMENTS MIL-R-26 E	REQUIREMENTS NF C 83-210	TYPICAL VALUES AND DRIFTS
Dielectric W/s Voltage	1000VRMS for 923... 947 500VRMS for 58... 523	± (0.1% + 0.05Ω)	–	± (0.1% + 0.05Ω)
Short Time Overload	5Pn/5s for Pn < 5W 10Pn/5s for Pn ≥ 5W	± (0.2% + 0.05Ω)	± 0.25% + 0.05Ω	± (0.1% + 0.05Ω)
Climatic Sequence	NF C 83-210 fasc. 19A - 55°C/+ 200°C 5 cycles	–	± 0.5% + 0.05Ω Insulation R >100MΩ	± (0.3% + 0.05Ω) Ins. resistance > 10^3MΩ
Humidity (Steady State)	NF C 83-210 fasc. 3A 56 days 95% R.H.	–	± 0.5% + 0.05 Insulation R > 100M	± (0.3% + 0.05) Ins. resistance > 10^3MΩ
Thermal Shock	Load at 100% P followed by cold temp. exposure at – 55°C	± (0.2% + 0.05Ω)	± 0.25% + 0.05Ω	± (0.1% + 0.05Ω)
Vibration	MIL-STD-202 Method 204 - Test D:20g 10/2000Hz	± (0.1% + 0.05Ω)	± 0.25% + 0.05Ω	± (0.05% + 0.05Ω)
Load Life	MIL-STD-202 Method 108PR 2000h	± (0.5% + 0.05Ω)	± 0.5% + 0.05Ω Insulation R ≥ 1GΩ	± (1% + 0.05Ω)
Moisture Resistance	MIL-STD-202 Method 106	± (0.2% + 0.05Ω) Insulation resistance >100MΩ	–	± (1% + 0.05Ω) Ins. resistance > 10^3MΩ
High Temperature	250h at + 275°C	± (0.5% + 0.05Ω)	± 0.5% + 0.05Ω Insulation R 1GΩ	± (0.3 % + 0.05Ω)
Shock	MIL-STD-202 100g Method 205 - Test C	± (0.1% + 0.05Ω)	± 0.25% + 0.05Ω	± (0.05% + 0.05Ω)

POWER RATING CHART



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**	**1kΩ**	**± 0.5%**	**± 100ppm/°C**
MODEL	STYLE	OHMIC VALUE	TOLERANCE	TEMPERATURE COEFFICIENT