

## Precision Hermetic Metal Film Resistors Commercial



### FEATURES

- Hermetic glass enclosure is impervious to harmful environments
- Inert gas filled
- Low noise (- 40 dB)
- Low TCR (down to 15 ppm/°C)

### GENERAL SPECIFICATIONS

**Resistance Range:** 10.0  $\Omega$  to 10.0 M $\Omega$

**Tolerance:**  $\pm 0.05\%$ ,  $\pm 0.1\%$ ,  $\pm 0.5\%$ , and  $\pm 1.0\%$

**Temperature Characteristics:**

$\pm 15$  ppm/°C to  $\pm 50$  ppm/°C

**Power Ratings:**

1/10, 1/8, 1/4, 1/2 and 1 W - 125 °C

1/8, 1/4, 1/2, 3/4, and 2 W - 70 °C

**Power Derating:** For ambient temperatures above 125 °C, see Power Derating Curve.

### MECHANICAL SPECIFICATIONS

**Termination:** Vishay Angstrom GSR Resistors use gold-plated nickel leads, which are both solderable and weldable (hot solder dip is available as an option).

### STANDARD ELECTRICAL SPECIFICATIONS

MODEL	POWER RATING (W)		MAXIMUM WORKING VOLTAGE	RESISTANCE RANGE ( $\Omega$ )	
	125 °C	70 °C		MIN.	MAX.
GSR55	0.10	0.125	200	10	2.5 M
GSR57	0.125	0.25	250	10	1 M
GSR60	0.125	0.25	250	10	3 M
GSR65	0.25	0.50	300	10	10 M
GSR70	0.50	0.75	350	10	10 M
GSR75	1.0	2.0	750	10	5 M

### GLOBAL PART NUMBER INFORMATION

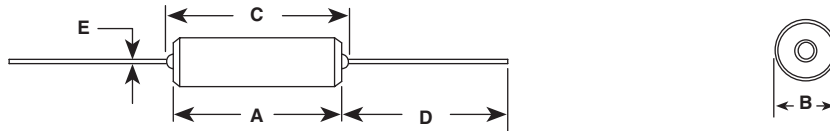
New Global Part Numbering: GSR55E49R900BMR (preferred part number format)

G S R 5 5 E 4 9 R 9 0 0 B M R

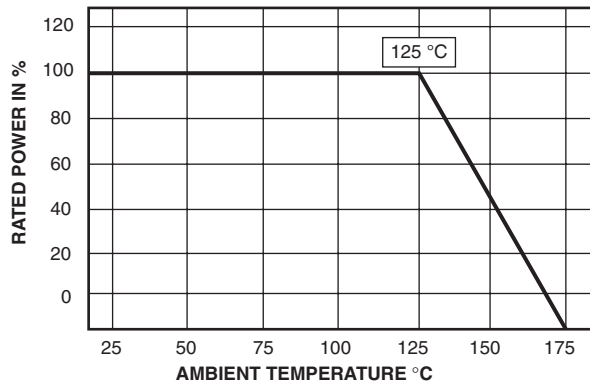
GLOBAL MODEL	TEMPERATURE COEFFICIENT	RESISTANCE VALUE	TOLERANCE CODE	PACKAGING	SPECIAL
(see Standard Electrical Specifications table)	X = 15 ppm E = 25 ppm H = 50 ppm	R = Decimal K = Thousand M = Million 10R000 = 10 $\Omega$ 49R900 = 49.9 $\Omega$ 680K00 = 680 k $\Omega$ 1M0000 = 1.0 M $\Omega$	A = $\pm 0.05\%$ B = $\pm 0.1\%$ D = $\pm 0.5\%$ F = $\pm 1.0\%$	MR = Foil Bag (55, 57, 60, 65, 70) MS = Foil Bag (75 only) CS = Reel (55, 57, 60) CT = Reel (65, 70, 75) KA = Ammo (55, 57, 60) KC = Ammo (65, 70, 75)	Blank = Standard (Dash Number) (up to 3 digits) From 1 - 999 as applicable

Historical Part Numbering: GSR55E49R9B (will continue to be accepted)

GSR55	E	49R9	B
HISTORICAL MODEL	TEMPERATURE COEFFICIENT	RESISTANCE VALUE	TOLERANCE CODE

**DIMENSIONS** in inches [millimeters]


MODEL	A LENGTH	B DIAMETER	C CL TO CL (MAX.)	D LENGTH ± 0.125 [± 3.18]	E DIAMETER ± 0.002 [± 0.051]	D APPROX. WEIGHT (g)
GSR55	0.280 ± 0.020 [7.11 ± 0.51]	0.110 ± 0.020 [2.79 ± 0.51]	0.379 [9.63]	1.50 [38.10]	0.025 [0.635]	0.337
GSR57	0.310 ± 0.025 [7.87 ± 0.64]	0.150 ± 0.020 [3.81 ± 0.51]	0.467 [11.86]	1.50 [38.10]	0.025 [0.635]	0.405
GSR60	0.425 ± 0.030 [10.80 ± 0.76]	0.150 ± 0.020 [3.81 ± 0.51]	0.530 [14.25]	1.50 [38.10]	0.025 [0.635]	0.450
GSR65	0.640 ± 0.040 [16.26 ± 1.02]	0.240 ± 0.025 [6.10 ± 0.64]	0.780 [19.81]	1.50 [38.10]	0.025 [0.635]	1.300
GSR70	0.640 ± 0.040 [16.26 ± 1.02]	0.240 ± 0.025 [6.10 ± 0.64]	0.780 [19.81]	1.50 [38.10]	0.032 [0.813]	1.440
GSR75	1.062 ± 0.062 [26.98 ± 1.58]	0.250 ± 0.025 [6.35 ± 0.64]	1.186 [30.12]	1.50 [38.10]	0.032 [0.813]	2.500

**POWER DERATING**

**MARKING**

- Style and Size
- Value
- Tolerance and RTC
- Date Code



### Disclaimer

All product specifications and data are subject to change without notice.

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