# Vishay Angstrohm



## **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  $10.0~\text{M}\Omega$ 

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

Temperature Characteristics: ± 15 ppm/°C to ± 50 ppm/°C

**Power Ratings:** 

1/10, 1/8, 1/4, 1/2 and 1 watt - 125 °C 1/8, 1/4, 1/2, 3/4, and 2 watt - 70 °C

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

#### **MECHANICAL SPECIFICATIONS**

**Termination:** Vishay Angstrohm GSR Resistors use goldplated 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	RESISTANCE RANGE (Ω)			
	125 °C	70 °C	VOLTAGE	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	TOLERA COD		PACKAGINO	j .	SPECIAL	
		$ \begin{array}{c} R = Decimal \\ K = Thousand \\ M = Million \\ \textbf{10R000} = 10 \ \Omega \\ \textbf{49R900} = 49.9 \ \Omega \\ \textbf{680K00} = 680 \ k\Omega \\ \textbf{1M0000} = 1.0 \ M\Omega \\ \end{array} $	$A = \pm 0.05 \% B = \pm 0.1 \% D = \pm 0.5 \% F = \pm 1.0 \%$		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		В		
HISTORICAL MODEL		TEMPERATURE COEFFICIENT		RESISTANCE VALUE		TOLERANCE CODE		

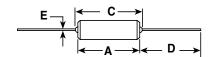




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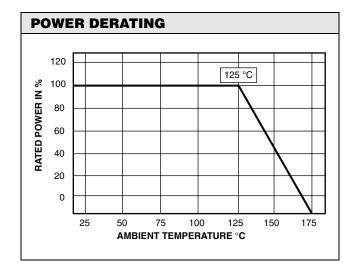
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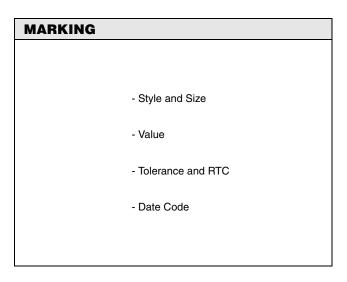
## **DIMENSIONS** in inches [millimeters]





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 (grams)
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





# **Legal Disclaimer Notice**



Vishay

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