Metal Film Resistors, Hermetically-Sealed, Precision, Industrial

FEATURES

- Hermetic glass enclosure is impervious to harmful environments
- Inert gas filled
- Low noise (-40 dB)
- Temperature range -65 °C to +175 °C
- Low TCR (down to 15 ppm/°C)

MECHANICAL SPECIFICATIONS

Termination: Vishay Angstrohm 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 $P_{70\,°C}$ W	POWER RATING $P_{125\,°C}$ W	MAXIMUM WORKING VOLTAGE (1) V	TEMPERATURE COEFFICIENT ± ppm/°C	TOLERANCE ± %	RESISTANCE RANGE Ω
GSR55	0.125	0.10	200	15, 25, 50	0.05, 0.1, 0.5, 1	10 to 2.5M
GSR57	0.25	0.125	250	15, 25, 50	0.05, 0.1, 0.5, 1	10 to 1M
GSR60	0.25	0.125	250	15, 25, 50	0.05, 0.1, 0.5, 1	10 to 3M
GSR65	0.50	0.25	300	15, 25, 50	0.05, 0.1, 0.5, 1	10 to 10M
GSR70	0.75	0.50	350	15, 25, 50	0.05, 0.1, 0.5, 1	10 to 10M
GSR75	2.0	1.0	750	15, 25, 50	0.05, 0.1, 0.5, 1	10 to 5M

Note

(1) Continuous working voltage shall be $\sqrt{P \times R}$ or maximum working voltage, whichever is less

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** = Ω **K** = kΩ **M** = MΩ **10R000** = 10 Ω **49R900** = 49.9 Ω **680K00** = 680 kΩ **1M0000** = 1.0 MΩ	**A** = ± 0.05 % **B** = ± 0.1 % **D** = ± 0.5 % **F** = ± 1.0 %	**MR** = foil bag (55, 57, 60) **MS** = foil bag (65, 70, 75) **CS** = reel (55, 57, 60) **CT** = reel (65, 70, 75)	Blank = standard (dash number) (up to 3 digits) From **1 to 999** as applicable

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

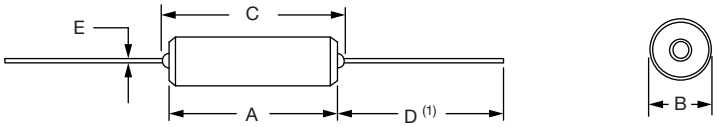
GSR55	E	49R9	B
HISTORICAL MODEL	TEMPERATURE COEFFICIENT	RESISTANCE VALUE	TOLERANCE CODE

Note

- For additional information on packaging, refer to the “Through-Hole Resistor Packaging” document (www.vishay.com/doc?31544)

For technical questions, contact: ff2aresistors@vishay.com

DIMENSIONS in inches (millimeters)

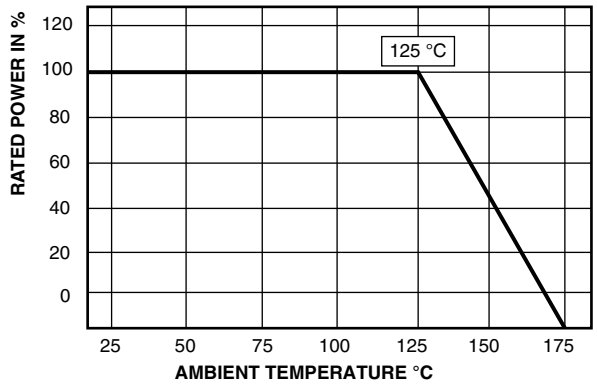


MODEL	A LENGTH	B DIAMETER	C CL TO CL (MAX.)	D LENGTH ± 0.125 (± 3.18)	E DIAMETER ± 0.002 (± 0.051)	D APPROX. WEIGHT (G)
GSR55	0.280 ± 0.020 (7.11 ± 0.51)	0.110 ± 0.020 (2.79 ± 0.51)	0.379 (9.63)	1.50 (38.10)	0.025 (0.635)	0.337
GSR57	0.310 ± 0.025 (7.87 ± 0.64)	0.150 ± 0.020 (3.81 ± 0.51)	0.467 (11.86)	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 (13.46)	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

Note

(1) Lead length for product in foil bag pack. For product supplied in tape and reel, the actual lead length would be based on the body size, tape spacing and lead trim

POWER DERATING



MARKING

Temperature coefficient: H = 50 ppm, E = 25 ppm, X = 15 ppm
Tolerance: F = 1 %, D = 0.5 %, B = 0.1 %, A = 0.05 %

GSR55, GSR57, GSR60, GSR65, GSR70, GSR75: (4 lines)

GSR-55	Style and size
24.9 Ω	Value
FE	Tolerance and TC
1143A	4-digit date code and production lot code

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