

FEATURES

- Available in resistances from 1 Ω to 9.1m Ω
- Resistor body: 2.3mm diameter, 6.3mm length
- Long-term stability
- Solder plated copper leads

RS PRO 1k Ω Carbon Film Resistor 0.25W $\pm 5\%$

RS Stock No.: 707-7666



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

A comprehensive range of high stability carbon film resistors qualified and tested to the requirements of IEC 115 and IEC 115-2. The ruggedized welded cap and lead method of manufacture provides a considerable strength and resistance to damage. The coating materials and the colour bands are epoxy resin and are highly resistant to solvents, abrasion and chipping. Improvements in materials and processing have allowed the rated power to be improved. Excellent stability against changes in load conditions or moisture levels, with a low noise level and high reliability make these carbon film resistors suitable for a wide range of applications. Rated at 70°C in free air mounted horizontally. Climatic category 55/155/56.

General Specifications

Resistance	1kΩ
Composition	Carbon Powder, epoxy resin
Technology	Carbon Film
Axial/Radial	Axial
Case Style	Ceramic

Electrical Specifications

Power Rating	0.25W
Tolerance	±5%
Maximum Operating Voltage	250V
Maximum Overload Voltage	500V

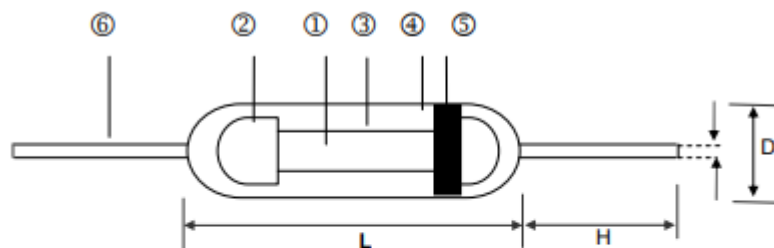
Mechanical Specifications

Resistor	
Dimensions	2.33mm x 6.3mm
Diameter	2.33mm
Length	6.3mm

Resistor Lead	
Dimensions	0.55mm x 28mm
Diameter	0.55mm
Length	28mm
Number of Terminals	2

Operation Environment Specifications

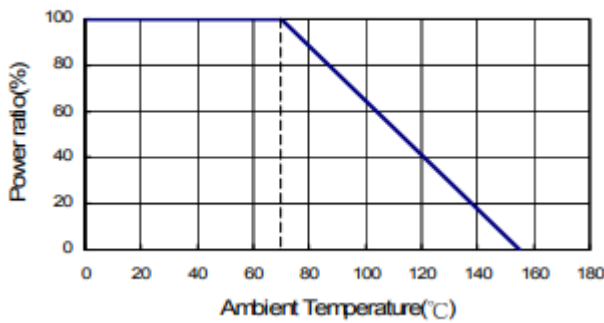
Minimum Operating Temperature	-55°C
Maximum Operating Temperature	155°C
Minimum Temperature Coefficient	-500 ppm/°C
Maximum Temperature Coefficient	350 ppm/°C



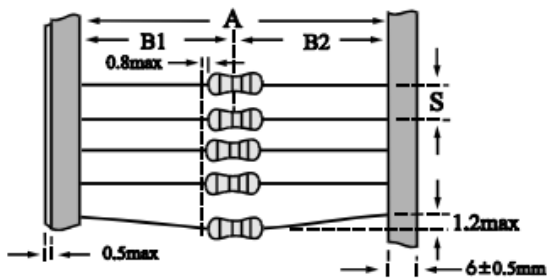
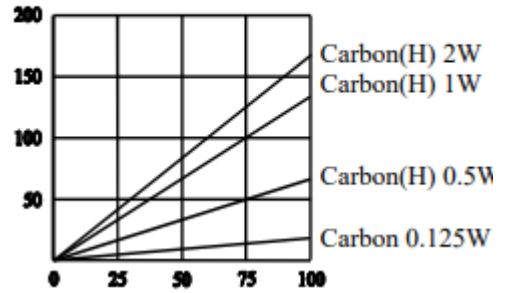
① Ceramic Rod	④ Non-flame Paint With Sol Vent-proof
② Tinned Iron Caps	⑤ Colour Code
③ Carbon Film	⑥ Lead Wire

Type	L	D	H	d	Weight (g) (1000pcs)
Carbon 0.125W	3.3+0.4/-0.2	1.8±0.3	29.3±2.0	0.452.3±0.03	92
Carbon 0.25W	6.3±0.5	2.3±0.3	28±2.0	0.55±0.03	155
Carbon 0.5W (H)	6.3±0.5	2.3±0.3	28±2.0	0.55±0.03	155
Carbon 1W (H)	9.0±0.5	3.2±0.5	26±2.0	0.65±0.03	352
Carbon 2W (H)	11.5±1.0	4.5±0.5	35±2.0	0.78±0.03	775

Derating Curve



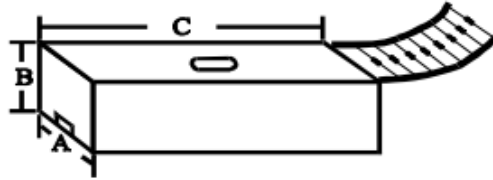
Hop-Spot Temperature



Unit: mm

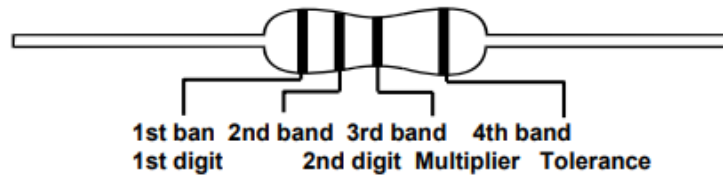
Packaging Type	Packing Methods		
	A	B1-B2	S
Carbon 0.125W	52+1/-0	1.2	5
Carbon 0.25W	52+1/-0	1.2	5
Carbon 0.5W (H)	52+1/-0	1.2	5
Carbon 1W (H)	52+1/-0	1.5	5
Carbon 2W (H)	52+1/-0	1.5	10

Ammo Packing



Unit: mm

Packaging Type	Packing Methods			Ammo Packing			
	A	B1-B2	S	A	B	C	Qty
Carbon 0.125W	26+1/-0	1.0	5	80	105	264	5,000
Carbon 0.25W	26+1/-0	1.0	5	80	105	264	5,000
Carbon 0.5W (H)	26+1/-0	1.0	5	80	105	264	5,000
Carbon 1W (H)	73+1/-0	1.5	5	103	82	265	1,000
Carbon 2W (H)	73+1/-0	1.5	10	103	96	265	1,000



±5%	E-24	1.0	1.1	1.2	1.3	1.5	1.6	1.8	2.0	2.2	2.4	2.7	3.0	3.3	3.6	3.9	4.3	4.7	5.1	5.6	6.2	6.8	7.5	8.2	9.1
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Color	Digit	Multiplier	Tolerance	
Black	0	10^0	-	-
Brown	1	10^1	-	-
Red	2	10^2	-	-
Orange	3	10^3	-	-
Yellow	4	10^4	-	-
Green	5	10^5	-	-
Blue	6	10^6	-	-
Purple	7	10^7	-	-
Grey	8	10^8	-	-
White	9	10^9	-	-
Gold	-	-	-	-
Silver	-	10^{-2}	-	-
Red-Green	-	10^{-1}	±5.0%	J