

FEATURES

- Carbon film construction
- Long-term stability
- Solder plated copper leads

RS PRO 2.2k Ω Carbon Film Resistor 0.25W $\pm 5\%$

RS Stock No.: 707-7690



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

The RS PRO series of carbon film axial leaded resistors offer excellent long term stability and feature standard solder-plated copper leads. The carbon film is the most common axial leaded resistor which is used for applications where a very good tolerance and temperature coefficient are not necessary.

General Specifications

Resistance	2.2kΩ
Composition	Carbon Powder, phenolic 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

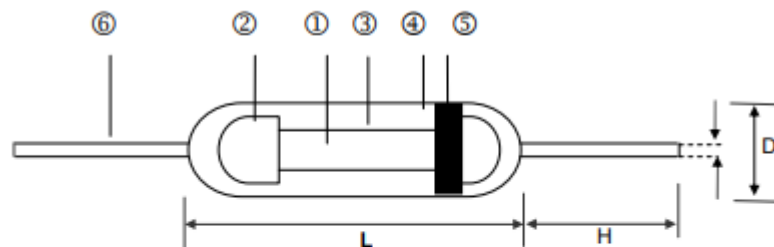
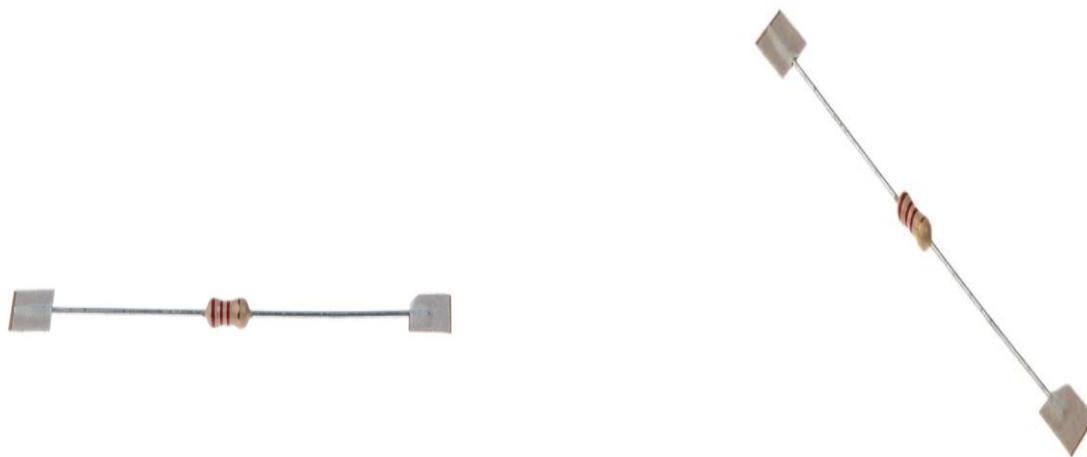
Mechanical Specifications

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

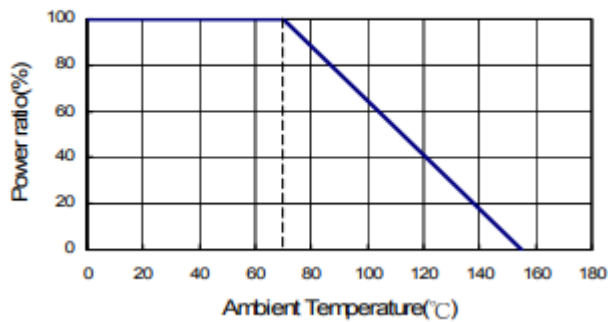
Minimum Operating Temperature	-50°C
Maximum Operating Temperature	155°C
Minimum Temperature Coefficient	-500ppm/°C
Maximum Temperature Coefficient	350ppm/°C



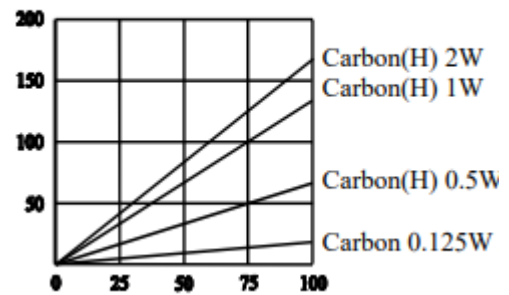
① Ceramic Rod	④ Non-flame Paint With Sol Vent-proof
② Tinned Iron Caps	⑤ Colour Code
③ Carbon Film	⑥ Lead Wire

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

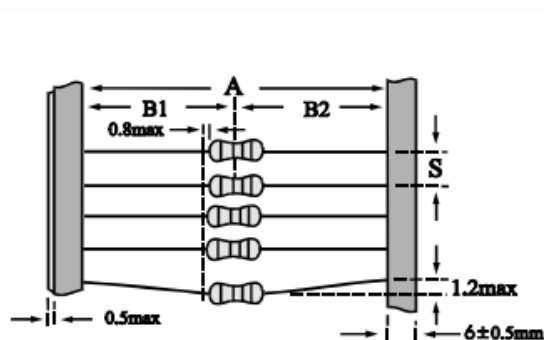
Derating Curve



Hop-Spot Temperature

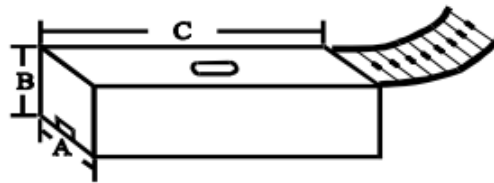


Type	Item	Power Rating at 70°C	Operating Temp. Range	Max. Working Voltage	Max. Overload Voltage	Dielectric Withstanding Voltage	Resistance Range
							±5%
Carbon		0.125W	-55 ~ +155°C	150V	300V	300V	0.1Ω - 22MΩ
Carbon		0.25W		250V	500V	500V	1Ω - 10MΩ
Carbon(H)		0.5W		300V	500V	500V	0.1Ω - 22MΩ
Carbon(H)		1W		400V	800V	800V	1Ω - 10MΩ
Carbon(H)		2W		500V	1000V	1000V	0.1Ω - 10MΩ



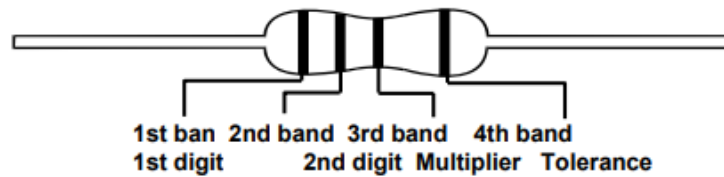
Unit: mm

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



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	-	-	±5.0%	J
Silver	-	10 ⁻²	-	-