

Miniature Size

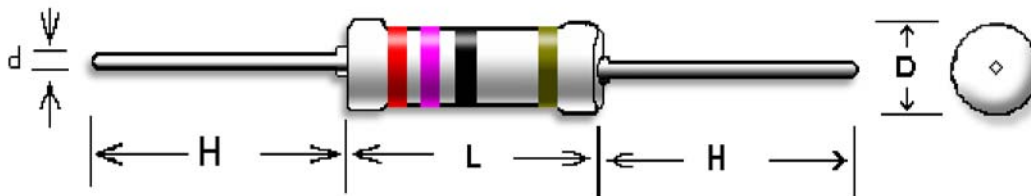
R-series Carbon Film Fixed Power Resistor

Specifications Per

- IEC 115-1 115-4
- MIL R-10509
- DIN 44051 44052

Features

- Conformal Multi-layer Coating
- Color Code Per MIL & EIA Standards
- Special Tin Plated Electrolytic Copper Lead Wire



Dimensions:

Type	Body Length (L , mm)	Body Diameter (D , mm)	Lead Wire Length (H , mm)	Lead Wire Diameter (d , mm)	Net Weight Per 1000Pcs
R100S	8.8±1.0	3.2±0.2	26±3.0	0.60±0.03	340 Grams
R200S	12.0±1.0	4.5±0.5	26±3.0	0.70±0.03	600 Grams
R300S	15.5±1.0	6.0±0.5	26±3.0	0.80±0.03	1200 Grams

General Specifications:

Type	Power Rating At 70°C	Max. Working Voltage	Max. Overload Voltage	Min. Resistance	Max. Resistance	Resistance Tolerance	Standard Resistance Values
R100S	1W	350V	650V	1Ω	10MΩ	±5%	E-24
R200S	2W	500V	1000V	1Ω	1.0MΩ	±5%	E-24
R300S	3W	500V	1000V	1Ω	1.0MΩ	±5%	E-24

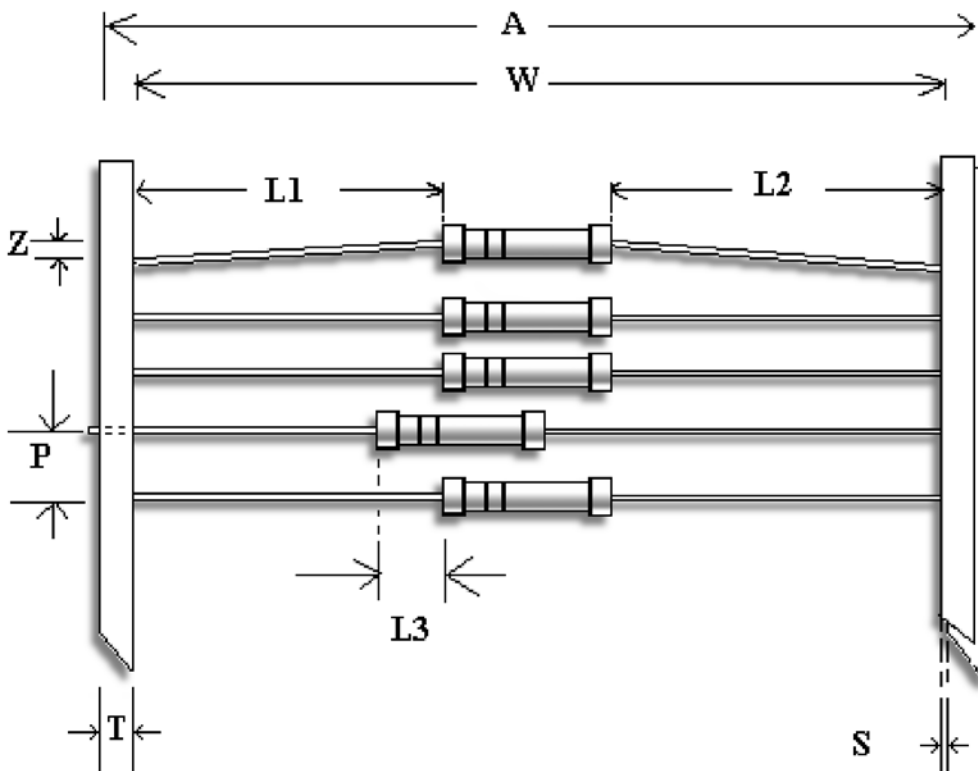
Special sizes, values, and specifications not listed available on special order.

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Taping/Packing Specifications:



Unit (mm)

Type	A Max.	L1-L2 (Max.)	L3 (Max.)	P ±0.5	S (Max.)	T ±0.5	W ±1.5	Z (Max.)
R100S	65	±1.0	0.5	5.0	0.8	6.0	52.5	1.2
R200S	65	±1.0	0.5	5.0	0.8	6.0	52.5	1.2
R300S	76	±1.5	1.0	10.0	0.8	6.0	63.5	1.2

Type	Packing Type	R100S	R200S	R300S
Minimum Packing QTY (pcs)	Reel	3000	2000	1000
	Ammo pack	2000	1000	500

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Technical Specifications:

Characteristics	Limits		
Dielectric Withstanding Voltage, V AC or DC	R100S	700	
	R200S /R300S	1000	
Temperature Coefficient, PPM / °C	R100S	R200S/R300S	
	≤ 33K	≤ 56K	±300
	36K~330K	68K~470K	- 500
	360K~470K	510K~1.0M	- 700
	510K~1.0M	>1.0M	-1000
	>1.0M		-1500
Operating Temperature Range, °C	-55~+155		
Insulation Resistance, MΩ	10 ⁴		
Voltage Coefficient, PPM / V	25		
Power Derating, Linear	100% at 70°C, down to zero at 155°C		

Performance Specifications:

Test Characteristics	Test Conditions	Limits
Short Time Over Load	IEC 60115-1 4.13 5 seconds 2.5x rated voltage (not over max. overload voltage)	±(1%+0.05R)
Load Life In Humidity	IEC 60115-1 4.24 56 days at 40°C and 93% relative humidity	±5%
Load Life 1,000 hours	IEC 60115-1 4.25.1 Rated load 1.5 hours ON, 0.5 hours OFF, at 70°C	±5%
Resistance To Soldering Heat	IEC 60115-1 4.18 10 seconds at 260°C solder bath temperature	±(1%+0.05R)
Solderability	MIL-STD-202 Method 208 Solder area covered after 230±5°C/5±0.5 seconds w/ flux applied	95% Min.
Vibration	IEC 60115-1 4.22 Six hours in each parallel and axial direction w/ a simple harmonic motion having an amplitude of 0.75mm and 10 to 500 Hz.	±(1%+0.05R)
Terminal Endurance	IEC 60115-1 4.25.3 1000 hours at 155°C without load	±(1%+0.05R)
Thermal Shock	IEC 60115-1 4.19 -55°C 30minutes, +155°C 30minutes, 5 cycles	±(2%+0.05R)

Ordering Information

Type	Tolerance	Resistance Value	Packaging	Special Request (Optional)
R100S	F (5%)	10K	TB (Tape/Box)	LV (Low value)

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