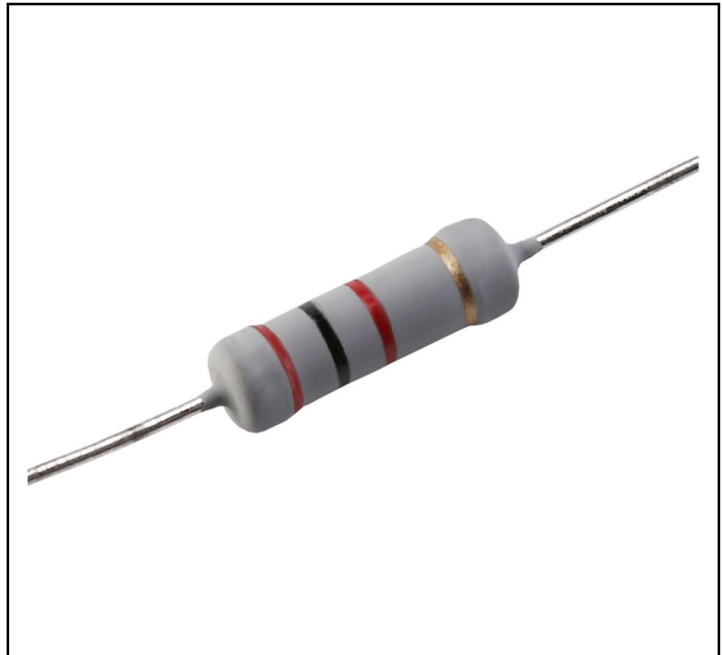


Features

- Excellent Long-Time stability
- Complete Flameproof Construction UL-94V0
- Wide resistance range : 0.1Ω~1MΩ
- Controlled temperature coefficient
- Resistance standard tolerance: $\pm 5\%$ (consult factory for $\pm 2\%$, 1%)
- Coating and marking resist trichlorethylene , freon , and other cleaning agents

RS PRO Metal Oxide Film Leaded Resistor

RS Stock No.: 0327943



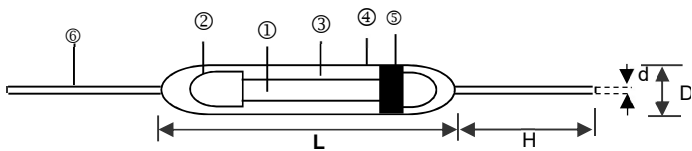
RS PRO is the own brand of RS. The RS PRO Seal of Approval is your assurance of professional quality, a guarantee that every part is rigorously tested, inspected, and audited against demanding standards. Making RS PRO the Smart Choice for our customers.

Applications

Applications Include:

- Telecommunications
- Medical Equipment

Construction

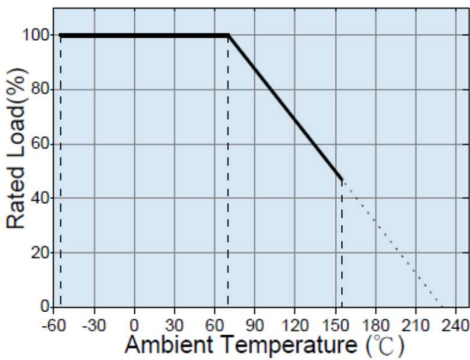


①	Insulation Coating	⑤	Resistor Layer
②	Trimming Line	⑥	Marking
③	Ceramic Core	⑦	Lead Wire
④	Electrode Cap		

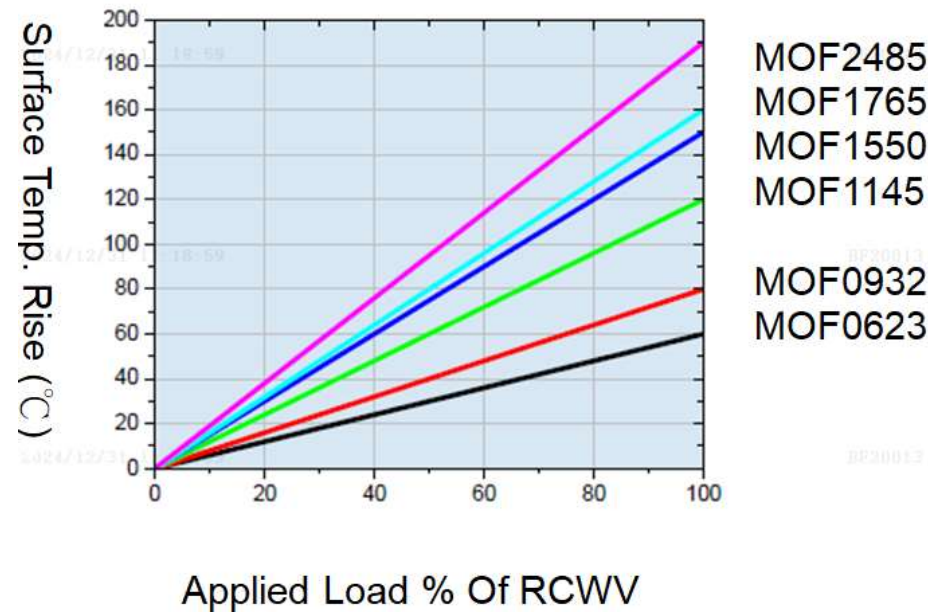
Dimensions

Type	L	D	H	d	Weight (g) (1000pcs)
MOF0623	6.3±0.5	2.3±0.3	28±3.0	0.55±0.03	156

Derating Curve



Hot-Spot Temperature



Part Numbering

MOF	0623	F	A	G	U	1001
Product Type	Dimensions (L×D)	Resistance Tolerance	Packaging Code	TCR (PPM/°C)	Power Rating	Resistance
	0623: 6.3x2.3	J: ±5%	A: Ammo	G: ±300	V: 1/4W	1001: 1KΩ

Standard Electrical Specifications

Item Type	Power Rating at 70°C	Operating Temp. Range	Max. Working Voltage	Max. Overload Voltage	Dielectric Withstanding Voltage	Resistance Range			TCR (PPM/°C)
						±1%	±2%	±5%	
0623	1/4W	-55 ~ +235°C	200V	350V	350V	0.1Ω – 1MΩ		0.1Ω – 1MΩ	±300

High Power Rating Electrical Specifications

Item Type	Power Rating at 70°C	Operating Temp. Range	Max. Working Voltage	Max. Overload Voltage	Dielectric Withstanding Voltage	Resistance Range			TCR (PPM/°C)
						±1%	±2%	±5%	
0623	1/2W	-55 ~ +235°C	250V	400V	350V	0.1Ω – 1MΩ		0.1Ω – 1MΩ	±300

Operating Voltage= $\sqrt{P \cdot R}$ or Max. operating voltage listed above, whichever is lower.

Overload Voltage= $2.5 \cdot \sqrt{P \cdot R}$ or Max. overload voltage listed above, whichever is lower.

For resistance value out of above range is by request. Below 10Ω and over 51K(excluded) are using alloy film.

Resistor body color: Standard Power Rating: Grey

High Power Rating : Grey or Pink are available

Environmental Characteristics

Item	Requirement	Test Method
Resistance Value	0.1Ω – 1MΩ	IEC-60115-1 4.5 Measure at a distance of 10mm from the cap end
Short Time Overload	±(1%+0.05Ω) for standard power ±(2%+0.05Ω) for high power	IEC-60115-1 4.13 2.5 times RCWV for 5 seconds
Insulation Resistance	> 1000MΩ	JIS-C-5202 4.6 The measure was executed by V-Block methods
Endurance	±(5%+0.05Ω)	IEC-60115-1 4.25 70±2°C, RCWV(or Umax., whichever less) for 1000 hrs with 1.5 hrs "ON" and 0.5 hrs "OFF"
Damp Heat, Steady State	±(5%+0.05Ω)	IEC-60115-1 4.24 40±2°C, 90~95% R.H. for 56 days, loaded with 0.1 times

		RCWV(or Umax., whichever less)
Solderability	95% min. Coverage	IEC-60115-1 4.17 245±5℃ for 3±0.5 seconds
Voltage Proof	By Type	IEC-60115-1 4.7 In V-Block for 60 seconds
Temperature Coefficient	By Type	IEC-60115-1 4.8 Resistance value at room temperature and room temperature+100℃
Periodic-Pulse Overload Test	±(2%+0.05Ω)	IEC-60115-1 4.39 4 times RCWV(or Umax., whichever less) for 10000 cycles with 1second "ON" and 25 seconds "OFF"
Solvent Resistance of Marking	No obvious deterioration of coatings and markings	IEC-60115-1 4.30 IPA for 5±0.5 min. with ultrasonic
Robustness of Terminations	Tensile: ≥2.5kg(24.5N)	IEC-60115-1 4.16 Direct Load for 10 seconds In the direction off the terminal leads
Temperature Cycling	±(1%+0.05Ω)	IEC-60115-1 4.19 -55°C/155°C with 5 cycles the duration at each temperature 30 min
Resistance to Soldering Heat	±(1%+0.05Ω)	IEC-60115-1 4.18 The solder iron heated to 260°C ±5°C and applied to the termination for duration of 10±1 seconds.

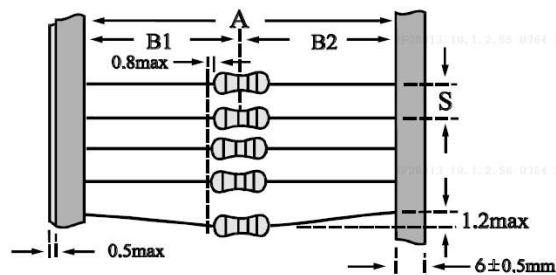
RCWV(Rated continuous working voltage)= $\sqrt{P \cdot R}$ or Max. Operating voltage whichever is lower

■ **Storage Temperature: 25±10°C; Humidity < 80%RH**

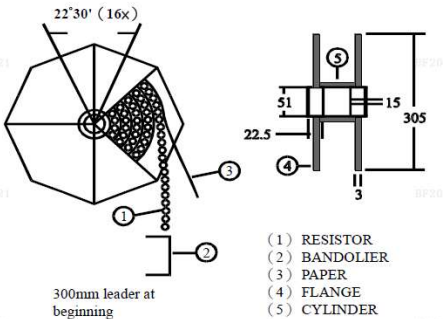
Taping/Packing Specifications

1. Standard Type (Reel & Ammo)

Packing Methods



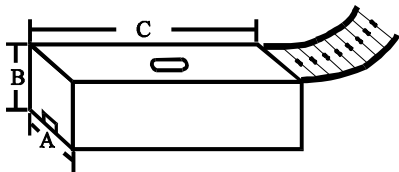
Reel Packing



Unit:mm

Packaging	Packing Methods			Reel Packing	
	A	B1-B2	S	Across Flange (A)	Qty
0623	52+1/-0	1.2	5±0.3	72	5,000
	26+0.5/-0	1.0			

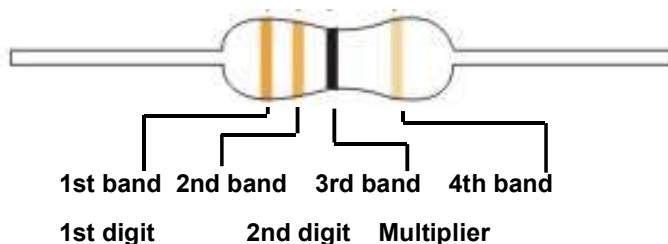
Ammo Packing



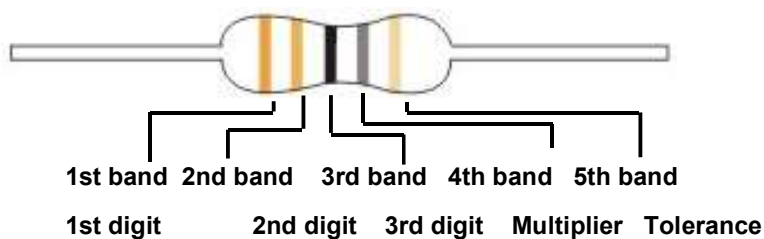
Unit: mm

Packaging	Packing Methods			Ammo Packing			
	A	B1-B2	S	A	B	C	Qty
0623	52+1/-0	1.2	5±0.3	79±2	100±3	257±5	5,000
	26+0.5/-0	1.0		52±2	109±3	252±5	

Marking & Resistance Tolerance



±5.00%	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
±2.00%																									



±1.00%	E-96	1.00	1.02	1.05	1.07	1.10	1.13	1.15	1.18	1.21	1.24	1.27	1.30	1.33	1.37	1.40	1.43	1.47	1.50	1.54	1.58	1.62	1.65	1.69	1.74
		1.78	1.82	1.87	1.91	1.96	2.00	2.05	2.10	2.15	2.21	2.26	2.32	2.37	2.43	2.49	2.55	2.61	2.67	2.74	2.80	2.87	2.94	3.01	3.09
		3.16	3.24	3.32	3.40	3.48	3.57	3.65	3.74	3.83	3.92	4.02	4.12	4.22	4.32	4.42	4.53	4.64	4.75	4.87	4.99	5.11	5.23	5.36	5.49
		5.62	5.76	5.90	6.04	6.19	6.34	6.49	6.65	6.81	6.98	7.15	7.32	7.50	7.68	7.87	8.06	8.25	8.45	8.66	8.87	9.09	9.31	9.53	9.76

Color	Digit	Multiplier	Tolerance
Without	-	-	-
Silver	-	10 ⁻²	-
Gold	-	10 ⁻¹	±5%
Black	0	10 ⁰	-
Brown	1	10 ¹	±1%
Red	2	10 ²	±2%
Orange	3	10 ³	-
Yellow	4	10 ⁴	-
Green	5	10 ⁵	-
Blue	6	10 ⁶	-
Violet	7	10 ⁷	-
Grey	8	10 ⁸	-
White	9	10 ⁹	-