

Miniature Size

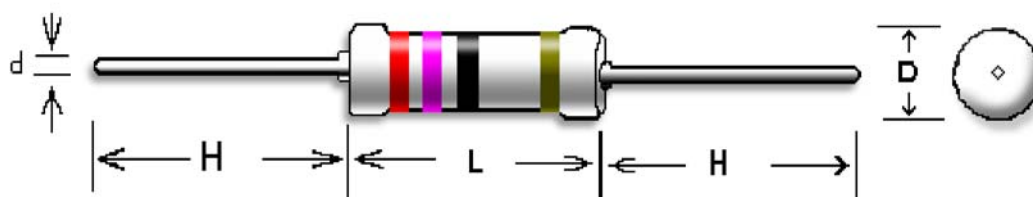
Wire Wound Resistors

Specifications Per

- IEC 115-1 115-4

Features

- Flameproof Multi-layer Coating Meets UL-94V-0
- Flameproof Feature Meets Overload Test UL-1412
- Color Code Per MIL & EIA Standards
- Special Tin Plated Electrolytic Copper Lead Wire



Dimensions:

Type	BODY (M/M)		LEADWIRE (M/M)	
	LENGTH (L)	DIAMETER (D)	LENGTH (L)	DIAMETER (D)
WA01S	8.8±1.0	3.2±0.2	28±3.0	0.8±0.03
WA02S	10.5±1.0	3.8±0.5	28±3.0	0.8±0.03
WA03S	13.5±1.0	5.0±0.5	30±3.0	0.8±0.03
WA04S	15.5±1.0	5.5±0.5	30±3.0	0.8±0.03
WA05S/ WA06S	19.0±1.0	6.0±0.5	30±3.0	0.8±0.03

General Specifications:

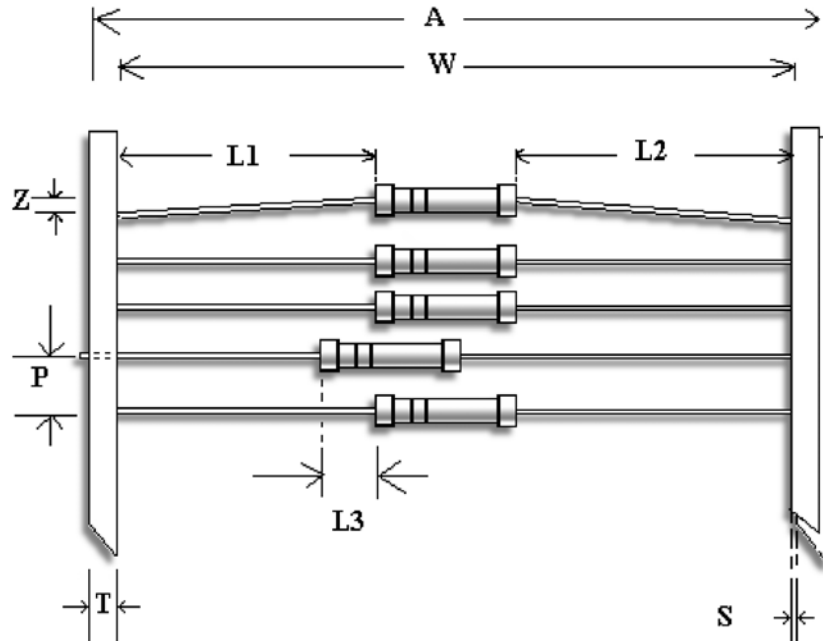
Type	Power Rating At 70°C	Max. Working Voltage	Max. Overload Voltage	Resistance Range Min.	Resistance Range Max.	Resistance Tolerance	Standard Resistance Value
WA01S	1W	350V	600V	0.1R	390R	± 2%, ±5%	E-24
WA02S	2W	350V	700V	0.1R	449R	± 2%, ±5%	E-24
WA03S	3W	350V	700V	0.1R	549R	± 2%, ±5%	E-24
WA04S	4W	350V	700V	0.1R	1K	± 2%, ±5%	E-24
WA05S WA06S	5W 6W	450V	800V	0.1R	1K5	± 2%, ±5%	E-24

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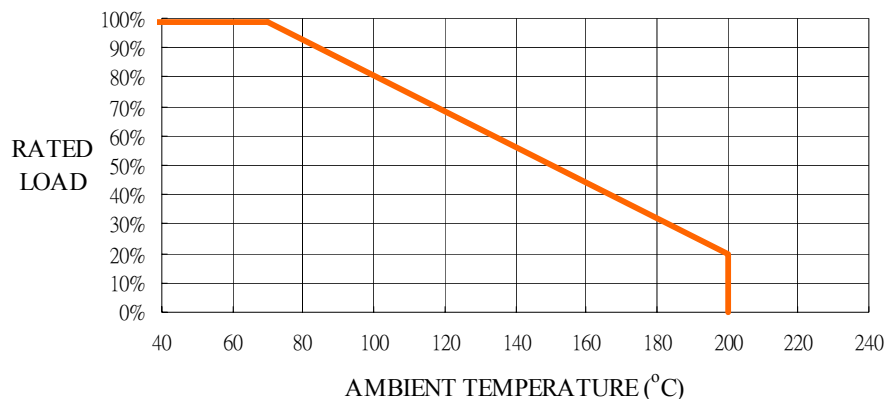
Taping Specifications:



Unit (mm)

Type	A (Max.)	L1-L2 (Max.)	L3 (Max.)	P ±0.5	S (Max.)	T ±0.5	W ±1.5	Z (Max.)
WA01S	65	±1.0	0.5	5.0	0.8	6.0	52.5	1.2
WA02S	65	±1.0	0.5	5.0	0.8	6.0	52.5	1.2
WA03S	76	±1.5	1.0	10.0	0.8	6.0	63.5	1.2
WA04S	76	±1.5	1.0	10.0	0.8	6.0	63.5	1.2
WA05S/WA06S	76	±1.5	1.0	10.0	0.8	6.0	63.5	1.2

POWER DERATING CURVE



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Performance Specifications:

Characteristics	Limits	
Dielectric Withstanding Voltage, VAC or DC	1W 2 to 3W 4 to 6W	350 600 1000
Temperature Coefficient, PPM / °C	±300	
Operating Temperature Range, °C	-55~+200	
Insulation Resistance, MΩ	10 ⁴	

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	90% 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 Strength	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)
WA01S	G (2%) J (5%)	100R	TR (Tape/Reel)	LV (Low value)

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