

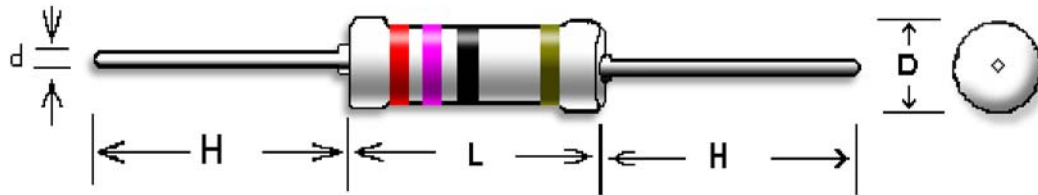
# MP - Metal Film Precision Resistor

### Specifications Per

- IEC-115-1
- MIL R-10509F
- DIN 44051

### 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
MP16	3.2±1.0	1.9±0.2	28±3.0	0.45±0.02	145 Grams
MP25	6.5±1.0	2.3±0.2	26±3.0	0.55±0.03	220 Grams
MP51	8.8±1.0	3.2±0.2	26±3.0	0.60±0.03	340 Grams

### General Specifications:

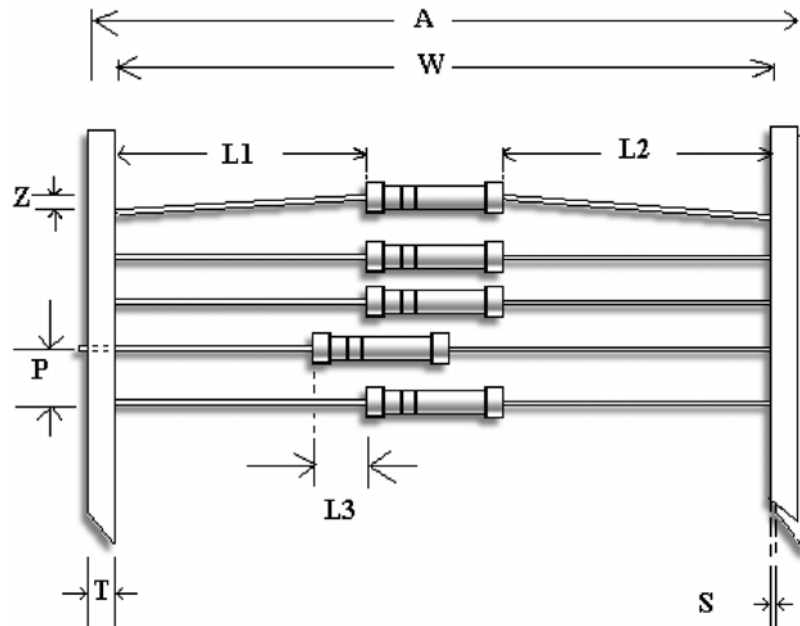
Type	Power Rating At 70°C	Max. Working Voltage	Max. Overload Voltage	Min. Resistance	Max. Resistance	Resistance Tolerance	Standard Resistance Values
MP16	1/6W	150	300V	10Ω	500KΩ	±0.5%	E-24/E-192
						±0.25%	
						±0.1%	
						±0.05%	
MP25	1/4W	250V	500V	10Ω	1MΩ	±0.5%	E-24/E-192
						±0.25%	
						±0.1%	
						±0.05%	
MP51	1/2W	350V	700V	10Ω	1MΩ	±0.5%	E-24/E-192
						±0.25%	
						±0.1%	
						±0.05%	

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

Oct. 26, 2004

# MP - Metal Film Precision Resistor

Taping/Packing Specifications:

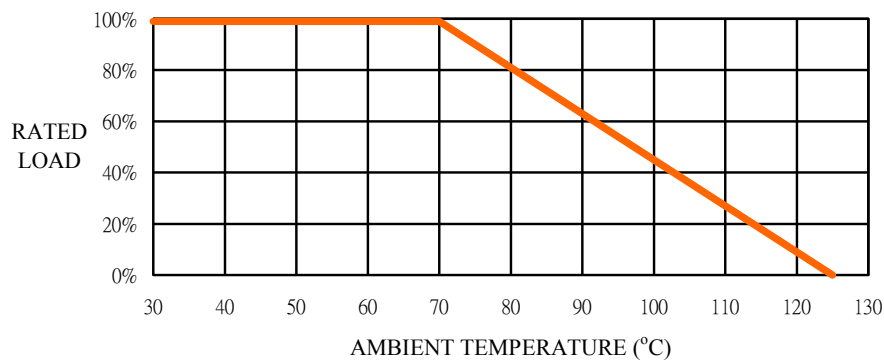


Unit (mm)

Type	A Max.	L1-L2 (Max.)	L3 (Max.)	P ±0.5	S (Max.)	T ±0.5	W ±1.5	Z (Max.)
MP16	65	±1.0	0.5	5.0	0.8	6.0	52.5	1.2
MP25	65	±1.0	0.5	5.0	0.8	6.0	52.5	1.2
MP51	65	±1.0	0.5	5.0	0.8	6.0	52.5	1.2

Type	Packing Type	MP16	MP25	MP51
Minimum Packing QTY (pcs)	Reel	5000	5000	3000
	Ammo pack	5000	5000	2000

POWER DERATING CURVE



Oct. 26, 2004

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## Technical Specifications:

Characteristics	Limits	
Dielectric Withstanding Voltage, VAC or DC	MP16 MP25 MP51	300 500 700
Temperature Coefficient, PPM / °C	±50, ±25, ±15, ±10	
Operating Temperature Range, °C	-55~+125	
Insulation Resistance, MΩ	10 <sup>4</sup>	
Voltage Coefficient, PPM / V	25	

## Performance Specifications:

Test Characteristics	Test Conditions	Limit
Short Time Over Load	IEC 60115-1 4.13 5 seconds 2.5x rated voltage (not over max. overload voltage)	±(0.25%+0.05R)
Load Life In Humidity	IEC 60115-1 4.24 56 days at 40°C and 93% relative humidity	±(1%+0.05R)
Load Life 1,000 hours	IEC 60115-1 4.25.1 Rated load 1.5 hours ON, 0.5 hours OFF, at 70°C	±(1%+0.05R)
Resistance To Soldering Heat	IEC 60115-1 4.18 10 seconds at 260°C solder bath temperature	±(0.25%+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	MIL-STD-202 Method 204 Six hours in each parallel and axial direction w/ a simple harmonic motion having an amplitude of 1.52mm and 10 to 20,000 Hz.	±(0.25%+0.05R)
Terminal Endurance	IEC 60115-1 4.25.3 1000 hours at 125°C without load	±(0.2%+0.05R)
Thermal Shock	IEC 60115-1 4.19 -55°C 30minutes, +125°C 30minutes, 5 cycles	±(0.25%+0.05R)

## Ordering Information

Type	Tolerance	Temperature Coefficient	Resistance Value	Packaging	Special Request (Optional)
MP16 MP25	B (0.1%), C (0.25%) D (0.5%), A (0.05%)	TK10	10K	TR (Tape/Reel)	LV (Low value)

Oct. 26, 2004