

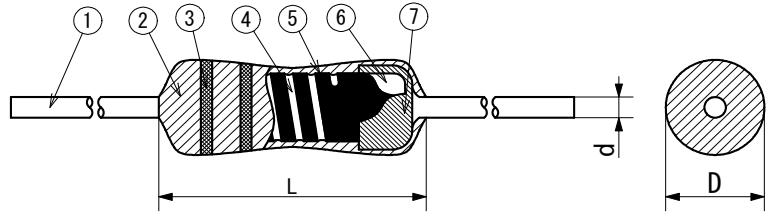


# Compact Simplified Insulated Metal Oxide Film Fixed Resistor

Model No. MOSC



## Appearance, Structure, and Dimensions



## Overview and Features

- Compact power metal oxide film fixed resistors.
- The exterior uses non-flammable silicone-based paint.
- UL94V-0 equivalent.
- Body color is green.

① Lead wire	④ Cutting groove	⑦ Cap
② Exterior resin	⑤ Resistive film	
③ Color Code	⑥ Porcelain	

Model	Dimensions (mm)		
	L	D	d
MOSC1/2W	6.5±1.0	2.2±0.5	0.6 +0.1/-0.05
MOSC1W	9.0±1.0	3.5±1.0	0.65±0.1 / 0.8±0.1
MOSC2W	12.0±1.5	4.0±1.0	0.8±0.1
MOSC3W	15.0±1.5	5.5±1.0	0.8±0.1

## Part Number Structure

Example: For MOSC1/2W 102 JTU,

MOSC	1/2W	102	J	TU
Model	Rated Power	Nominal Resistance Value	Resistance Tolerance	Processing/Packaging Form
Compact Simple Insulation Type Metal Oxide Film Fixed Resistor	1/2W: 0.5W 1W: 1W 2W: 2W 3W: 3W	102: 1kΩ E-24 Series Compatible	G: ±2.0% J: ±5.0% K: ±10.0%	TU: 52mm axial taping TP: 26mm axial taping RP: Radial Tapping RY: Radial Tapping L: Self-supporting

\*See specifications for details refer to specifications.

\*Refer to common specifications for details.

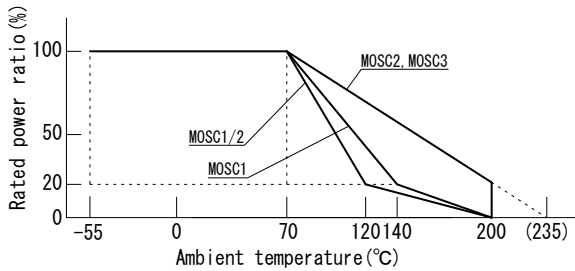
## Rating Table

Model	Rated Power	Maximum Operating Voltage	Maximum Overload Voltage	Resistance Value Range [Ω]		Temperature Coefficient of Resistance [ppm/°C]	Rated ambient temperature [°C]	Operating Temperature Range [°C]
	[W]	[V]	[V]	G Class	Class J, K			
MOSC1/2W	0.5	250	400	0.2 to 10k	0.1 to 10k	±300	+70	-55~ +200
MOSC1W	1.0	350	600	0.2 to 100k	0.1 to 100k			
MOSC2W	2.0	350	600	0.2 to 100k	0.1 to 100k			
MOSC3W	3.0	350	600	0.2 to 100k	0.1 to 100k			

\*Rated voltage:  $\sqrt{P \times R}$  (P: Rated power, R: Nominal resistance value)

\*Low resistance (0.1 to 9.1Ω) is a metal plating film.

## Load Reduction Curve



## Performance

Test Item	Standard Value	Test Method
Short-term overload	Tolerance: ±1.0%	JIS C 5201-1 Clause 4.13 2.5 times rated voltage, 5 seconds
Solder Heat Resistance	Tolerance: ±1.0%	JIS C 5201-1 Clause 4.18 Solder temperature 260° C Immersion time 10s
High Temperature and Humidity (Steady State)	Tolerance: ±5.0%	JIS C 5201-1 Clause 4.24 40° C, 95% RH, 1,000 hours Rated power: 90 minutes ON, 30 minutes OFF
Durability (Rated Load)	Tolerance: ±5.0%	JIS C 5201-1 Clause 4.25.1 70° C, 1,000 hours Rated power: 90 minutes ON, 30 minutes OFF