METAL OXIDE FILM FIXED RESISTORS

Features

- High safety standard, high purity ceramic core
- Excellent non-flame coating, non-inductive type available
- Stable performance in diverse environment, meet EIAJ-RC2655A requirements
- Too low or too high ohmic value can be supplied on a case to case basis

Ordering Procedure: (Ex.: MOR 1/2W, +/-5%, 100Ω, T/B-1000)

M	O	R	0	W	2	J	0	1	0	1	A	1	0

Resistor Type:
MOR = Metal Oxide Film Fixed Resistors

Special Feature:
0 = Standard Product
I = Non-Inductive

Wattage:
Normal size: W4=1/4W, W2=1/2W, 1W=1W, 2W=2W, 3W=3W, 5W=5W, 7W=7W, 8W=8W, 9W=9W
Small size: S2=1/2W-S, 1S=1W-S, 2S=2W-S, 3S=3W-S, 5S=5W-S,
Extra small size: 5U=5W-SS

Tolerance:
G = ±2%, J = ±5%, K = ±10%

Resistance Value:
- E-24 series: the 1st digit is "0", the 2nd & 3rd digits are for the significant figures of the resistance and the 4th indicate the number of zeros: "J" ~ 0.1, "K" ~ 0.01
  Ex. 4.7Ω ~ 47J, 4.7KΩ ~ 472
- E-96 series: The 1st to 3rd digits are significant figures of resistance and the 4th one denotes number of zeros.
  Ex. 1.33 KΩ = 1331

Packing Type:
A = Tape / Box
T = Tape / Reel
B = Bulk / Box
P = Tape / Box of PT-26 mm

Packing Qty:
1 = 1,000 pcs, 2 = 2,000 pcs,
5 = 5,000 pcs, A = 500 pcs,
B = 2,500 pcs, 0 = for Bulk / Box packing.

Additional Information:
0 = PT-52 mm, NIL for PT-26
8 = PT-58 mm
9 = PT-64 mm
7 = Lead wire (H=38mm)

** More explanation on part no, please see details on pages 79-80.*

Performance Specifications

Temperature coefficient	± 350PPM/°C
Short-time overload	Normal size: ΔR/R ≤ ±(1.0% + 0.05Ω), with no evidence of mechanical damage.
	Small size: ΔR/R ≤ ±(2.0% + 0.05Ω), with no evidence of mechanical damage.
Dielectric withstanding voltage	No evidence of flashover, mechanical damage, arcing or insulation breakdown.
Pulse overload	Normal size: ΔR/R ≤ ±(2.0% + 0.05Ω), with no evidence of mechanical damage.
	Small size: ΔR/R ≤ ±(5.0% + 0.05Ω), with no evidence of mechanical damage.
Terminal strength	No evidence of mechanical damage.
Resistance to soldering heat	ΔR/R ≤ ±(1.0% + 0.05Ω), with no evidence of mechanical damage.
Solderability	Min. 95% coverage
Resistance to solvent	No deterioration of protective coating and markings.
Temperature cycling	ΔR/R ≤ ±(2.0% + 0.05Ω), with no evidence of mechanical damage.
Humidity (Steady state)	ΔR/R ≤ ±(2.0% + 0.05Ω), with no evidence of mechanical damage.
Load life in humidity	ΔR/R ≤ ±5% for <100KΩ; ±10% for ≥ ±100KΩ
Load life	ΔR/R ≤ ±5% for <100KΩ; ±10% for ≥ ±100KΩ
Non-Flame	No evidence of flaming or arcing.

**More details, please see pages 77-78.*

RoHS

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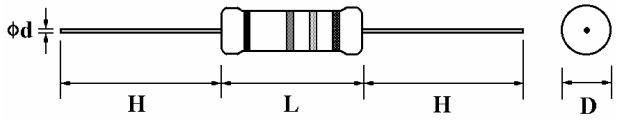


Normal Size

Part No.	Style	Power Rating at 70°C	Dimension (mm)				Max. Working Voltage	Max. Overload Voltage	Dielectric Withstanding Voltage	Resistance Range
			D Max.	L Max.	H ± 3	d ± 0.05				
MOR0W4	MOR-25	1/4W (0.25W)	2.5	7.5	28	0.54	250V	400V	250V	0.3Ω ~ 50KΩ
MOR0W2	MOR-50	1/2W (0.5W)	3.5	10.0	28	0.54	250V	400V	250V	0.3Ω ~ 50KΩ
MOR01W	MOR-100	1W	5.0	12.0	28	0.70	350V	600V	350V	0.3Ω ~ 50KΩ
MOR02W	MOR-200	2W	5.5	16.0	28	0.70	350V	600V	350V	0.3Ω ~ 50KΩ
MOR03W	MOR-300	3W	6.5	17.5	28	0.75	500V	800V	500V	5Ω ~ 100KΩ
MOR05W	MOR-500	5W	8.5	26.0	38	0.75	750V	1,000V	750V	5Ω ~ 150KΩ
MOR07W	MOR-700	7W	8.5	32.0	38	0.75	750V	1,000V	750V	20Ω ~ 150KΩ
MOR08W	MOR-800	8W	8.5	41.0	38	0.75	750V	1,000V	750V	30Ω ~ 200KΩ
MOR09W	MOR-900	9W	8.5	54.0	38	0.75	750V	1,000V	750V	50Ω ~ 200KΩ

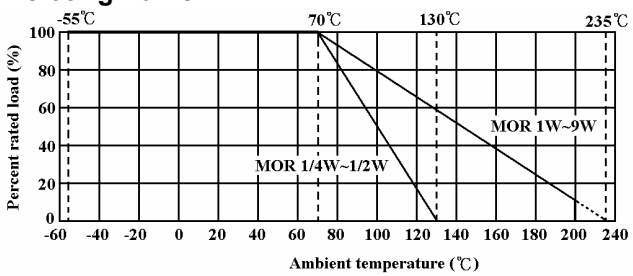
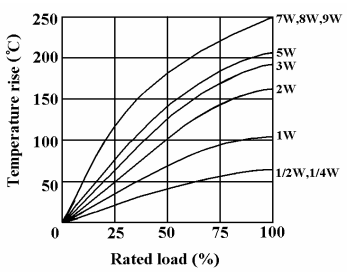
Small Size

Part No.	Style	Power Rating at 70°C	Dimension (mm)				Max. Working Voltage	Max. Overload Voltage	Dielectric Withstanding Voltage	Resistance Range
			D Max.	L Max.	H ± 3	d ± 0.05				
MOR0S2	MOR-50-S	1/2W (0.5W)	2.5	7.5	28	0.54	250V	400V	250V	0.3Ω ~ 50KΩ
MOR01S	MOR-100-S	1W	3.5	10.0	28	0.54	350V	600V	350V	0.3Ω ~ 50KΩ
MOR02S	MOR-200-S	2W	5.0	12.0	28	0.70	350V	600V	350V	0.3Ω ~ 50KΩ
MOR03S	MOR-300-S	3W	5.5	16.0	28	0.70	350V	600V	350V	0.3Ω ~ 50KΩ
MOR05U	MOR-500-SS	5W	6.5	17.5	28	0.75	500V	800V	500V	5Ω ~ 100KΩ
MOR05S	MOR-500-S	5W	8.0	25.0	38	0.75	500V	800V	500V	5Ω ~ 150KΩ

Note:

- Standard E-24 series values in ±5% tolerance
- Standard gray base color for normal size product; sea blue color for small size product
- Standard Non-flammable coating
- Non-Inductive type available on a case to case basis

Derating Curve



Heat Rise Chart