Metal Oxide Film Fixed Resistors

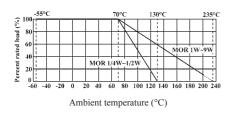


Feature

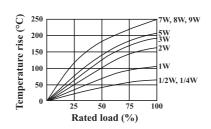
- Excellent flame retardant coating
- Stable performance in diverse environments
- High purity ceramic core
- Meet EIA-RC2655A requirements
- High safety standard

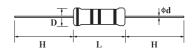


Derating Curve



Heat Rise Chart





Specifications

Part No.	Туре	Power Rating At 70°C	Dimension (mm)				Max.	Max.	Dielectric	
			D Max.	L Max.	d +0.02 -0.05	H±3	Working Voltage	Overload Voltage	Withstanding Voltage	Resistance Range
Normal Size										
MOROW4	MOR-25	1/4W	2.5	7.5	0.6	28	250V	400V	250V	$0.1\Omega\sim 100 K\Omega$
MOROW2	MOR-50	1/2W	4	10	0.6	28	250V	400V	250V	$0.1\Omega\sim 120 K\Omega$
MOROIW	MOR-100	IW	5	12	0.7	28	350V	600V	350V	$0.1\Omega\sim 150 K\Omega$
MOR02W	MOR-200	2W	5.5	16	0.8	28	350V	600V	350V	0.1Ω ~ 150ΚΩ
MOR03W	MOR-300	3W	6.5	17.5	0.8	28	500V	800V	500V	$0.1\Omega\sim150\text{K}\Omega$
MOR05W	MOR-500	5W	8.5	26	0.8	38	750V	1000V	750V	0.1Ω ~ 180ΚΩ
MOR07W	MOR-700	7W	8.5	32	0.8	38	750V	1000V	750V	20Ω ~ 150ΚΩ
MOR08W	MOR-800	8W	8.5	41	0.8	38	750V	1000V	750V	30Ω ∼ 200ΚΩ
MOR09W	MOR-900	9W	8.5	54	0.8	38	750V	1000V	750V	50Ω ∼ 200ΚΩ
Small Size & Extra	Small Size									
MOROS2	MOR-50-S	1/2W	3	7.5	0.6	28	250V	400V	250V	0.1Ω ~ 100ΚΩ
MOR01S	MOR-100-S	1W	4.5	10	0.7	28	350V	600V	350V	0.1Ω ~ 120ΚΩ
MOR02S	MOR-200-S	2W	5	12	0.7	28	350V	600V	350V	$0.1\Omega\sim150\text{K}\Omega$
MOR03S	MOR-300-S	3W	5.5	16	0.8	28	350V	600V	350V	$0.1\Omega\sim 150 K\Omega$
MOR05U	MOR-500-SS	5W	6.5	17.5	0.8	28	500V	800V	500V	$0.1\Omega\sim 150 K\Omega$
MOR05S	MOR-500-S	5W	8	25	0.8	38	500V	800V	500V	0.1Ω ~ 180ΚΩ

- \bullet Standard E-24 series values in \pm 5% tolerance
- Standard Gray base color for Normal Size product; Blue color for Small Size product
- Standard Non Flammable coating
- Non Inductive type available on a case to case basis

Performance Specifications

Temperature coefficient $\pm 350PPM/^{\circ}C$

Short-time overload Normal Size, $\Delta R/R \leq \pm (1\% + 0.05\Omega)$, with no evidence of mechanical damage

Small Size, $\Delta R/R \leq \pm (2\% + 0.05\Omega)$, with no evidence of mechanical damage

Dielectric withstanding voltage No evidence of flashover, mechanical damage, arcing or insulation breakdown.

Pulse overload Normal Size, $\Delta R/R \leq \pm (2\% + 0.05\Omega)$, with no evidence of mechanical damage

Small Size, $\Delta R/R \leq \pm (5\% + 0.05\Omega)$, with no evidence of mechanical damage.

Terminal strength No evidence of mechanical damage.

Resistance to Soldering heat $\Delta R/R \leq \pm (1\% + 0.05\Omega)$, with no evidence of mechanical damage.

Solderability Min. 95% coverage.

Resistance to solvent No deterioration of protective coating and markings.

Temperature cycling $\Delta R/R \leq \pm (2\% + 0.05\Omega)$, with no evidence of mechanical damage.

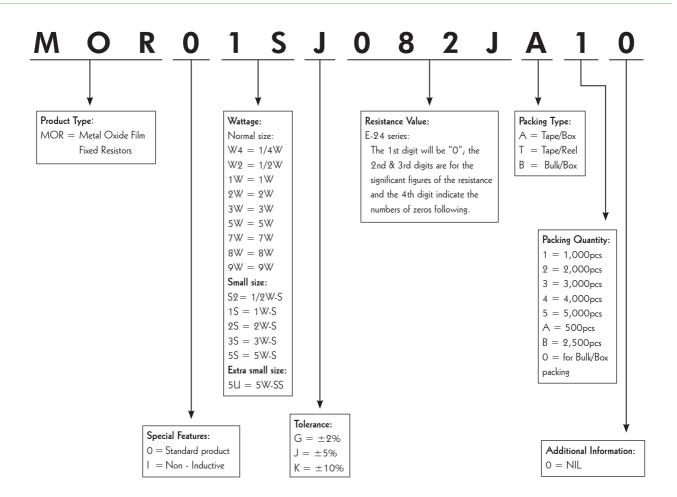
Humidity (Steady state) $\Delta R/R \leq \pm (2\% + 0.05\Omega)$, with no evidence of mechanical damage.

 $\mbox{Load life in humidity} ~~ \Delta R/R : \leq \pm 5\% \mbox{ for } < 100 \mbox{K}\Omega \mbox{, } \pm 10\% \mbox{ for } \geq 100 \mbox{K}\Omega .$

Load life $\Delta R/R$: $\leq \pm 5\%$ for $< 100 K\Omega_i \pm 10\%$ for $\geq 100 K\Omega$.

Flame retardant No evidence of flaming or arcing.

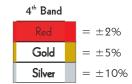
Ordering Procedure (Example: MOR 1W-S 5% 8.2\Omega T/B-1000)





Four Band Color Code (Available for CFR, MOR, KNP & 2% or 5% of MFR Products)





1234







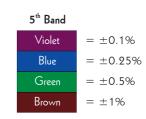
Five Band Color Code (Available for MFR 1% & FRN Products)





012345678

1 st Band		2 nd Band		3 rd Band		
Black	= 0	Black	= 0	Black	= (
Brown	= 1	Brown	= 1	Brown	=	
Red	= 2	Red	= 2	Red	=	
Orange	= 3	Orange	= 3	Orange	=	
Yellow	= 4	Yellow	= 4	Yellow	=	
Green	= 5	Green	= 5	Green	=	
Blue	= 6	Blue	= 6	Blue	=	
Violet	= 7	Violet	= 7	Violet	=	
Grey	= 8	Grey	= 8	Grey	=	
White	= 9	White	= 9	White	=	



4 th Band	
Black	= Multiply by 1 (100)
Brown	= Multiply by 10 (101)
Red	= Multiply by 100 (102)
Orange	= Multiply by 1,000 (103)
Yellow	= Multiply by 10,000 (104)
Green	= Multiply by 100,000 (105)
Blue	= Multiply by 1,000,000 (106)
Violet	= Multiply by 10,000,000 (107)
Gold	= Multiply by 0.1 (10-1)
Silver	= Multiply by 0.01 (10-2)