

## 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.	Type	Power Rating At 70°C	Dimension (mm)				Max. Working Voltage	Max. Overload Voltage	Dielectric Withstanding Voltage	Resistance Range
			D Max.	L Max.	d $\begin{matrix} +0.02 \\ -0.05 \end{matrix}$	H $\pm 3$				
<b>Normal Size</b>										
MOR0W4	MOR-25	1/4W	2.5	7.5	0.6	28	250V	400V	250V	0.1Ω ~ 100KΩ
MOR0W2	MOR-50	1/2W	4	10	0.6	28	250V	400V	250V	0.1Ω ~ 120KΩ
MOR01W	MOR-100	1W	5	12	0.7	28	350V	600V	350V	0.1Ω ~ 150KΩ
MOR02W	MOR-200	2W	5.5	16	0.8	28	350V	600V	350V	0.1Ω ~ 150KΩ
MOR03W	MOR-300	3W	6.5	17.5	0.8	28	500V	800V	500V	0.1Ω ~ 150KΩ
MOR05W	MOR-500	5W	8.5	26	0.8	38	750V	1000V	750V	0.1Ω ~ 180KΩ
MOR07W	MOR-700	7W	8.5	32	0.8	38	750V	1000V	750V	20Ω ~ 150KΩ
MOR08W	MOR-800	8W	8.5	41	0.8	38	750V	1000V	750V	30Ω ~ 200KΩ
MOR09W	MOR-900	9W	8.5	54	0.8	38	750V	1000V	750V	50Ω ~ 200KΩ
<b>Small Size &amp; Extra Small Size</b>										
MOR05S	MOR-50-S	1/2W	3	7.5	0.6	28	250V	400V	250V	0.1Ω ~ 100KΩ
MOR01S	MOR-100-S	1W	4.5	10	0.7	28	350V	600V	350V	0.1Ω ~ 120KΩ
MOR02S	MOR-200-S	2W	5	12	0.7	28	350V	600V	350V	0.1Ω ~ 150KΩ
MOR03S	MOR-300-S	3W	5.5	16	0.8	28	350V	600V	350V	0.1Ω ~ 150KΩ
MOR05U	MOR-500-SS	5W	6.5	17.5	0.8	28	500V	800V	500V	0.1Ω ~ 150KΩ
MOR05S	MOR-500-S	5W	8	25	0.8	38	500V	800V	500V	0.1Ω ~ 180KΩ

- 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

<b>Temperature coefficient</b>	± 350PPM/°C
<b>Short-time overload</b>	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
<b>Dielectric withstanding voltage</b>	No evidence of flashover, mechanical damage, arcing or insulation breakdown.
<b>Pulse overload</b>	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.
<b>Terminal strength</b>	No evidence of mechanical damage.
<b>Resistance to Soldering heat</b>	$\Delta R/R \leq \pm(1\%+0.05\Omega)$ , with no evidence of mechanical damage.
<b>Solderability</b>	Min. 95% coverage.
<b>Resistance to solvent</b>	No deterioration of protective coating and markings.
<b>Temperature cycling</b>	$\Delta R/R \leq \pm(2\%+0.05\Omega)$ , with no evidence of mechanical damage.
<b>Humidity (Steady state)</b>	$\Delta R/R \leq \pm(2\%+0.05\Omega)$ , with no evidence of mechanical damage.
<b>Load life in humidity</b>	$\Delta R/R: \leq \pm 5\%$ for $<100K\Omega$ ; $\pm 10\%$ for $\geq 100K\Omega$ .
<b>Load life</b>	$\Delta R/R: \leq \pm 5\%$ for $<100K\Omega$ ; $\pm 10\%$ for $\geq 100K\Omega$ .
<b>Flame retardant</b>	No evidence of flaming or arcing.

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



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



1 2 3 4

4 <sup>th</sup> Band	
Red	= ±2%
Gold	= ±5%
Silver	= ±10%

### 1<sup>st</sup> Band

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

### 2<sup>nd</sup> Band

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

### 3<sup>rd</sup> Band

Black	= Multiply by 1 ( $10^0$ )
Brown	= Multiply by 10 ( $10^1$ )
Red	= Multiply by 100 ( $10^2$ )
Orange	= Multiply by 1,000 ( $10^3$ )
Yellow	= Multiply by 10,000 ( $10^4$ )
Green	= Multiply by 100,000 ( $10^5$ )
Blue	= Multiply by 1,000,000 ( $10^6$ )
Violet	= Multiply by 10,000,000 ( $10^7$ )
Gold	= Multiply by 0.1 ( $10^{-1}$ )
Silver	= Multiply by 0.01 ( $10^{-2}$ )

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



1 2 3 4 5

5 <sup>th</sup> Band	
Violet	= ±0.1%
Blue	= ±0.25%
Green	= ±0.5%
Brown	= ±1%

### 1<sup>st</sup> Band

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

### 2<sup>nd</sup> Band

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

### 3<sup>rd</sup> Band

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

### 4<sup>th</sup> 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 <sup>-1</sup> )
Silver	= Multiply by 0.01 (10 <sup>-2</sup> )