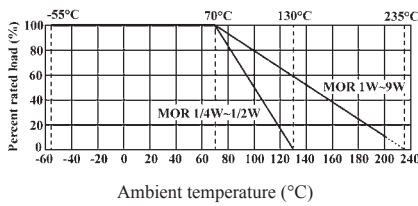


Feature

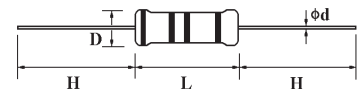
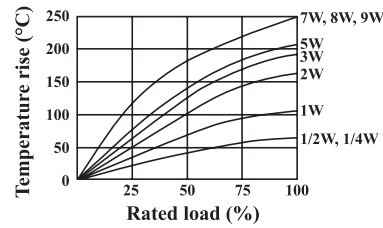
- Excellent flame retardant coating
- Stable performance in diverse environments
- High purity ceramic core
- Meet EIA-RC2655A requirements
- High safety standard



Derating Curve



Heat Rise Chart



Specifications

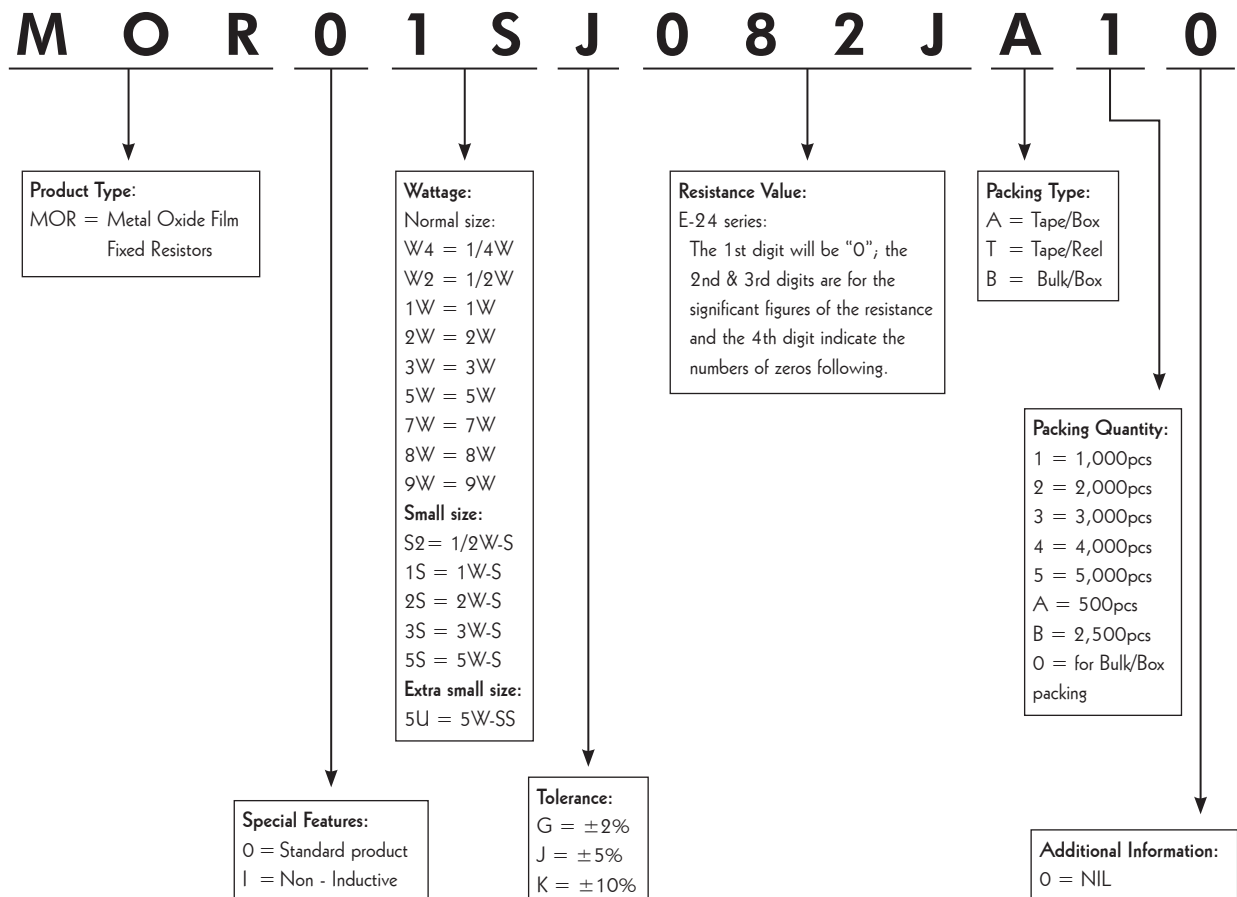
| Part No. | Type | Power Rating At 70°C | Dimension (mm) | | | | Max. Working Voltage | Max. Overload Voltage | Dielectric Withstanding Voltage | Resistance Range |
|--|------------|----------------------|----------------|--------|--|-----------|----------------------|-----------------------|---------------------------------|------------------|
| | | | D Max. | L Max. | d $\begin{matrix} +0.02 \\ -0.05 \end{matrix}$ | H ± 3 | | | | |
| Normal Size | | | | | | | | | | |
| 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 |
| Small Size & Extra Small Size | | | | | | | | | | |
| 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

| | |
|--|--|
| Temperature coefficient | ± 350PPM/°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. |
| Load life in humidity | $\Delta R/R: \leq \pm 5\%$ for $<100K\Omega$; $\pm 10\%$ for $\geq 100K\Omega$. |
| Load life | $\Delta R/R: \leq \pm 5\%$ for $<100K\Omega$; $\pm 10\%$ for $\geq 100K\Omega$. |
| Flame retardant | 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 th Band | |
|----------------------|--------|
| Red | = ±2% |
| Gold | = ±5% |
| Silver | = ±10% |

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

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

| 3 rd 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 th Band | |
|----------------------|----------|
| Violet | = ±0.1% |
| Blue | = ±0.25% |
| Green | = ±0.5% |
| Brown | = ±1% |

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

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

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

| 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) |