

Fusible Resistors:

Feature:

- Raw materials used for fusible resistors are that of Metal Film Resistors
- Ideal circuit opening controller, disconnecting units from overload rating specified
- Too low or too high ohmic value can be supplied on a case to case basis

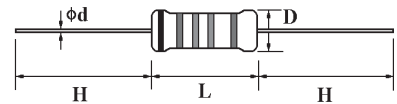


Fusing Characteristics

Power Test

| | | |
|-----------------|-------|--------------|
| 16×Power Rating | | ≤ 60 seconds |
| 20×Power Rating | | ≤ 40 seconds |
| 24×Power Rating | | ≤ 30 seconds |
| 28×Power Rating | | ≤ 20 seconds |
| 32×Power Rating | | ≤ 15 seconds |

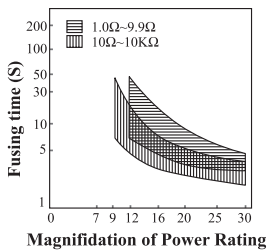
Fusing Time



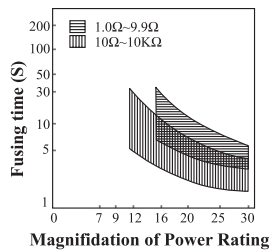
Specifications

| Part No. | Type | Power Rating At 70°C | Dimension (mm) | | | | Dielectric Withstanding Voltage | Resistance Range |
|----------|---------|----------------------|----------------|--------|---------------------------------------|-------|---------------------------------|------------------|
| | | | D Max. | L Max. | d ^{+0.02} / _{-0.05} | H ± 3 | | |
| FRN0W4 | FRN-25 | 1/4W | 2.5 | 6.8 | 0.6 | 28 | 300V | 1Ω ~ 10KΩ |
| FRN0W2 | FRN-50 | 1/2W | 3 | 9 | 0.6 | 28 | 350V | 1Ω ~ 10KΩ |
| FRN01W | FRN-100 | 1W | 4 | 10 | 0.7 | 28 | 350V | 1Ω ~ 10KΩ |
| FRN02W | FRN-200 | 2W | 5 | 12 | 0.7 | 28 | 600V | 1Ω ~ 10KΩ |
| FRN03W | FRN-300 | 3W | 5.5 | 16 | 0.8 | 28 | 600V | 1Ω ~ 10KΩ |

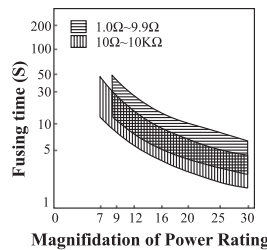
FRN-25



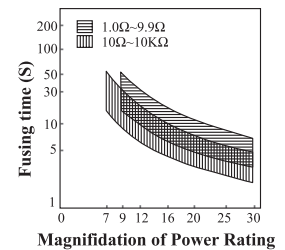
FRN-100



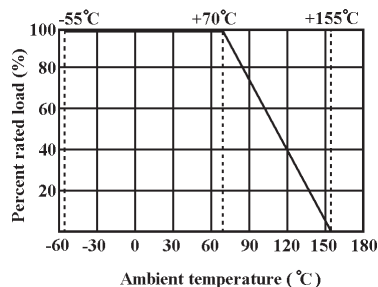
FRN-50



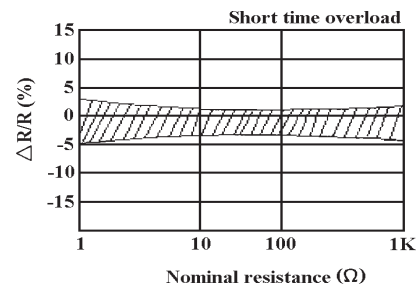
FRN-200 & 300



Derating Curve



Overload Curve



Fusible Resistors:

Performance Specifications

| | |
|---------------------------------|--|
| Temperature coefficient | $\pm 350\text{PPM} / ^\circ\text{C}$ |
| Short-time overload | $\Delta R/R \leq \pm (2\% + 0.05\Omega)$, with no evidence of mechanical damage. |
| Dielectric withstanding voltage | No evidence of flashover, mechanical damage, arcing or insulation breakdown. |
| 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. |
| Temperature cycling | $\Delta R/R \leq \pm (2\% + 0.05\Omega)$, with no evidence of mechanical damage. |
| Load life in humidity | $\Delta R/R \leq \pm (5\% + 0.05\Omega)$, with no evidence of mechanical damage. |
| Load life | $\Delta R/R \leq \pm (5\% + 0.05\Omega)$, with no evidence of mechanical damage. |
| Flame retardant | Not have any specimens which burn with flaming combustion after each application of the test flame |

Ordering Procedure (Example: FRN 1W 5% 1 Ω T/B-1000)

F R N 0 1 W J 0 1 0 J A 1 0

Product Type:
FRN = Fusible Resistors

Wattage:
Normal size:
W4 = 1/4W
W2 = 1/2W
1W = 1W
2W = 2W
3W = 3W

Resistance Value:
E-24 series:
The 1st digit will be "0"; the 2nd & 3rd digits are for the significant figures of the resistance and the 4th digit indicate the numbers of zeros following

Tolerance: G = $\pm 2\%$, J = $\pm 5\%$, K = $\pm 10\%$

Special Features: 0 = Standard product

Additional Information: 0 = NIL

Packing Quantity:

1 = 1,000pcs, 2 = 2,000pcs, 3 = 3,000pcs, 4 = 4,000pcs
5 = 5,000pcs, A = 500pcs, B = 2,500pcs ,
0 = for Bulk/Box packing

Packing Type: A = Tape/Box , T = Tape/Reel , B = Bulk/Box