

Flame-Proof Fusible Resistors





Type FRN Series

The resistive element comprises a resistive film sputtered onto a ceramic element. Metal end caps are force fitted to the element prior to spiralling. Tinned copper lead wires are welded to the end caps and the components are then coated with four layers of a flame-proof cement. All resistors are tested for value and tolerance. The technology allows the manufacture of custom fusible characteristics.

Key Features

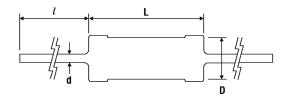
- Superior quality resistors with fusing characteristics for overload conditions.
- Flame-proof during fusing.
- Ideal for use in safetycritical and circuit protection applications.
- These resistors fuse in less than 60 seconds at 16 times rated power. (See table)

Characteristics - Electrical

Type FRN Series

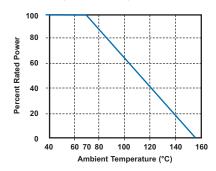
	FRN25	FRN50S	FRN100S	FRN200S	FRN300S	
Rated Power @ 70°C (W)	0.25	0.5	1	2	3	
Resistance Range (Ohms) Min	R12	R12	R33	R30	R30	
Max	12K	12K	10K	1K0	1K0	
Tolerance (%)	5					
Code letter	J					
Temperature Coefficient (ppm/°C)	±350			±200 (-30°C to +150°C)		
Selection Series	E12					
Limiting Element Voltage	250	250	300	300	300	
Max Permitted Element Voltage	250	250	300	350	350	
Max Overload Voltage	500	500	600	600	600	
Max Intermittent Overload Voltage	500	500	600	600	600	
Max Withstand Voltage After Fusing	300	350	450	450	450	
Operating Temp. Range (°C)	-55 to +155					
Climatic Category	55/155/56					
Insulation Resistance Min Dry (ohms)	1000M					

Dimensions



Style	L	D	d Nom	I
FRN25	6.3 ±0.5	2.3 ±0.3	0.54	25.0
FRN50S	6.3 ±0.5	2.3 ±0.3	0.54	25.0
FRN100S	9.0 ±0.5	3.2 ±0.5	0.54	25.0
FRN200S	11.0 ±1.0	4.5 ±1.0	0.70	25.0
FRN300S	15.0 ±1.0	5.5 ±1.0	0.80	25.0

Derating Curve - FRN25, FRN50S, FRN100S



FRN200S, FRN300S

