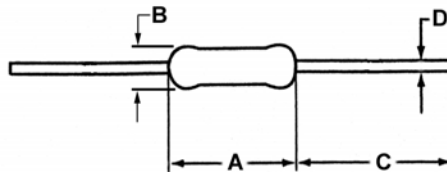


- Features:
- Coating meets UL 94V-0
 - Designed for constant current to provide overload protection
 - Consistent performance and reliability
 - Cut and formed product is available on select sizes, contact factory for details
 - RoHS compliant / lead-free



Electrical Specifications					
Type / Code	Power Rating (Watts) @ 70°C	Maximum Working Voltage (1)	Maximum Overload Voltage	Resistance Temperature Coefficient	Ohmic Range (Ω) and Tolerance
					5%
FRN16	0.166W	150V	200V	±350 ppm/°C	0.56 - 10K
FRN14	0.25W	200V	300V	±350 ppm/°C	0.22 - 10K
FRN12	0.5W	250V	400V	±350 ppm/°C	0.47 - 10K
FRN1	1W	300V	600V	±350 ppm/°C	0.47 - 10K
FRN2	2W	300V	600V	±350 ppm/°C	1 - 3K

(1) Lesser of \sqrt{PR} or maximum working voltage

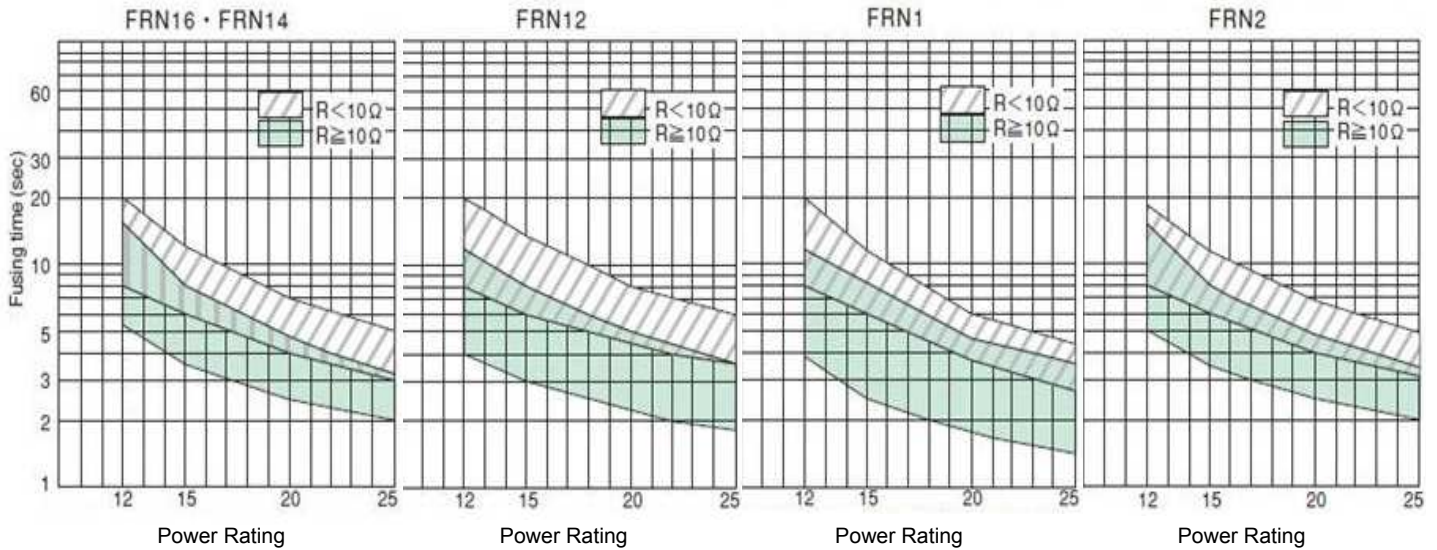


Mechanical Specifications					
Type / Code	A Body Length	B Body Diameter	C Lead Length (Bulk)	D Lead Diameter	Unit
FRN16	0.126 + 0.008 / 0	0.073 + 0.006	1.102 + 0.118	0.018 + 0.002	inches
	3.20 + 0.20 / 0	1.85 ± 0.15	28.00 ± 3.00	0.45 ± 0.05	mm
FRN14	0.236 + 0.020	0.091 + 0.008	1.102 + 0.118	0.022 + 0.002	inches
	6.00 ± 0.50	2.30 ± 0.20	28.00 ± 3.00	0.55 ± 0.05	mm
FRN12	0.354 + 0.039	0.118 + 0.020	1.102 + 0.118	0.028 + 0.002	inches
	9.00 ± 1.00	3.00 ± 0.50	28.00 ± 3.00	0.70 ± 0.05	mm
FRN1	0.433 + 0.039	0.157 + 0.020	1.102 + 0.118	0.031 + 0.002	inches
	11.00 ± 1.00	4.00 ± 0.50	28.00 ± 3.00	0.80 ± 0.05	mm
FRN2	0.591 + 0.039	0.217 + 0.039	1.378 + 0.118	0.031 + 0.002	inches
	15.00 ± 1.00	5.50 ± 1.00	35.00 ± 3.00	0.80 ± 0.05	mm

Performance Characteristics	
Test	Test Results
Moisture Resistance	±5%
Thermal Shock	±1%
Load Life @ 70°C - 1,000hrs	±5%
Resistance to Soldering Heat	±1%
Short Time Overload	±2%

Operating Temperature Range: -40°C to +155°C

Fusing Curves



How to Order

1	2	3	4	5	6	7	8	9	10	11
F	R	N	1	2	J	T	4	R	7	0

Product Series		Size	Power Rating	Tolerance			Packaging			Resistance Value	
FRN	Fusing Metal Film	16	0.166W	Code	Tol	Value	Code	Description	Size	Quantity	Four characters with the multiplier used as the decimal holder. 0.47 ohm = R470 10 Kohm = 10K0
		14	0.25W	J	5%	E24	T	Tape and Reel	FRN16, FRN14	5,000	
		12	0.5W						FRN12, FRN1	2,500	
		1	1W				A	Ammo	FRN2	1,000	
		2	2W						FRN16	5,000	
									FRN14, FRN12	2,000	
									FRN1	1,000	
									FRN2	500	
									FRN16	2,000	
							B	Bulk	FRN14, FRN12	1,000	
									FRN1, FRN2		

Legacy Part Number (before January 3, 2011):

SEI Type		Code	Nominal Resistance	Tolerance	Packaging
FRN		1/2	4.7	5%	R
Type	Description	Code	Wattage	Tolerance	Values
FRN	Fusing Metal Film	1/6	0.166W	5%	E24
		1/4	0.25W		
		1/2	0.5W		
		1	1W		
		2	2W		
SEI Types	Pkg Qty	Description	Code		
FRN16, FRN14	5,000	tape and reel	R		
FRN12, FRN1	2,500				
FRN2	1,000				
FRN16	5,000	ammo	T		
FRN14, FRN12	2,000				
FRN1	1,000				
FRN2	500	bulk	A		
FRN16	2,000				
FRN14, FRN12 FRN1, FRN2	1,000				