

- 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

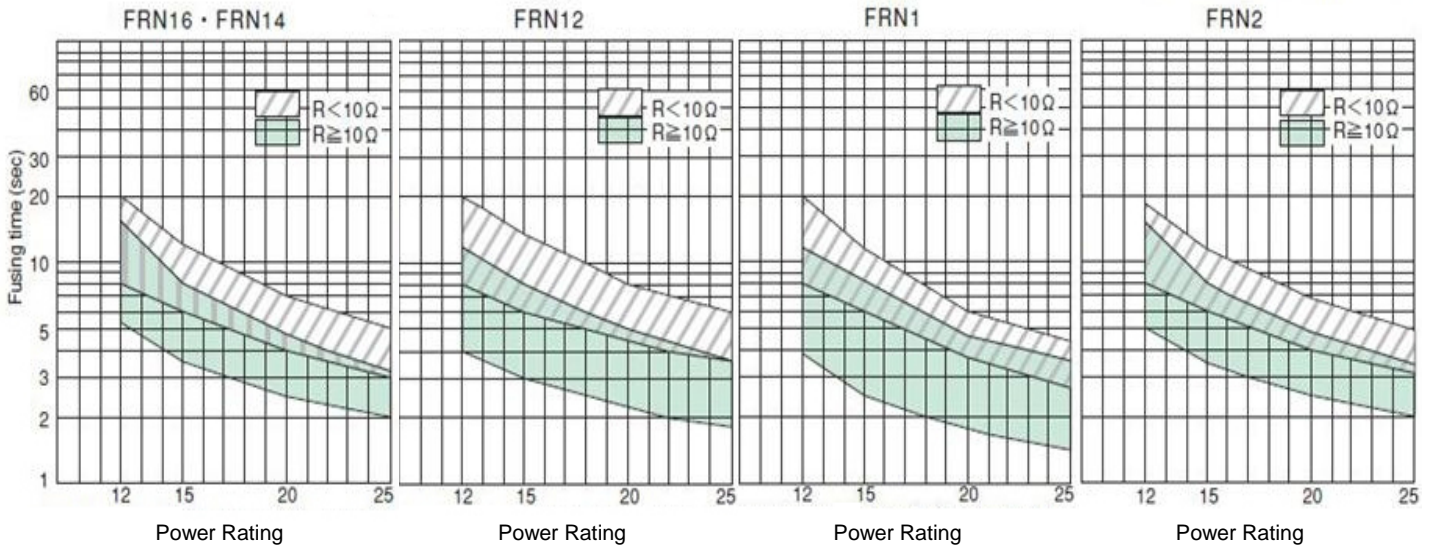
(1) Lesser of √PR or maximum working voltage

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

Performance Characteristics	
Test	Test Result
Moisture Resistance	±5%
Thermal Shock	±1%
Load Life @ 70°C - 1,000 hours	±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			Code	Tol	Value	Code	Description	Size	Quantity	
		16	0.166W	J	5%	E24	T	Tape and Reel	FRN16, FRN14	5,000	Four characters with the multiplier used as the decimal holder. 0.47 ohm = R470 10 Kohm = 10K0
		14	0.25W						FRN12, FRN1	2,500	
		12	0.5W						FRN2	1,000	
		1	1W				A	Ammo	FRN16	5,000	
		2	2W						FRN14, FRN12	2,000	
									FRN1	1,000	
									FRN2	500	
							B	Bulk	FRN16	2,000	
									FRN14, FRN12	1,000	
									FRN1, FRN2	1,000	

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