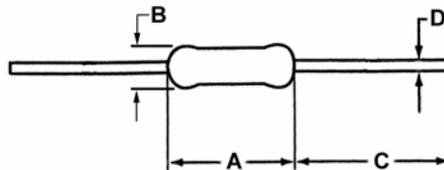


- Features:
- Coating meets UL 94V-0
 - Designed for constant current to provide overload protection
 - Consistent performance and reliability
 - Cut and formed product is available on select sizes, contact factory for details
 - RoHS compliant / lead-free



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

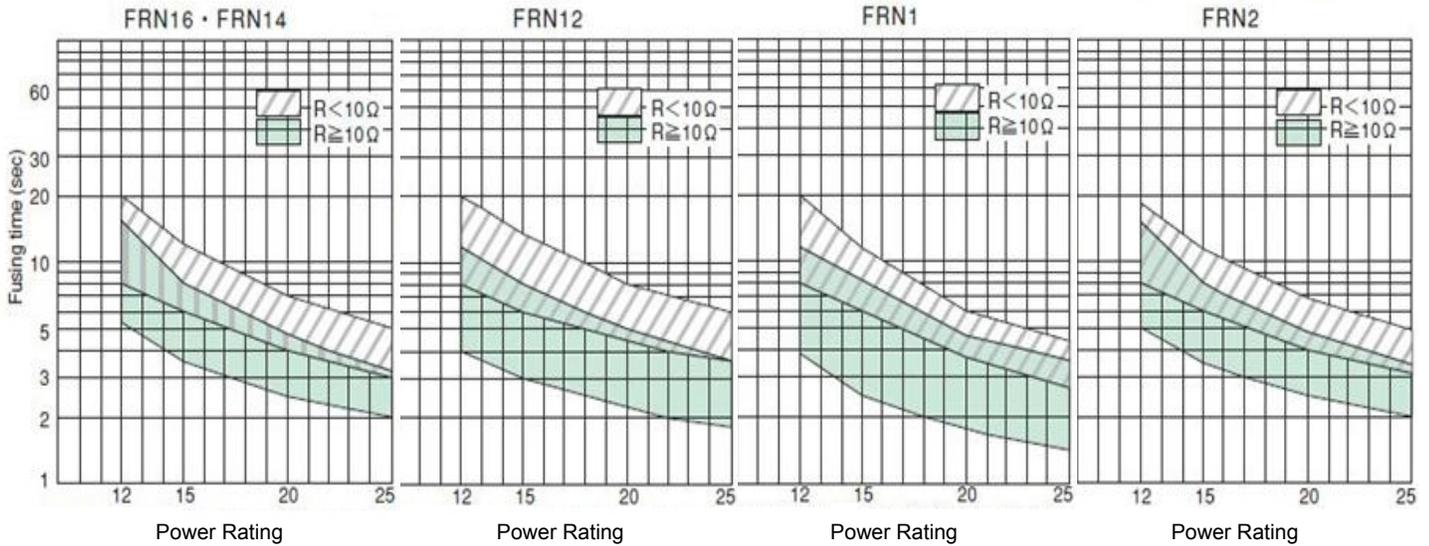


Mechanical Specifications					
Type / Code	A Body Length	B Body Diameter	C Lead Length (Bulk)	D Lead Diameter	Unit
FRN16	0.126 + 0.008 / 0	0.073 + 0.006	1.102 + 0.118	0.018 + 0.002	inches
	3.20 + 0.20 / 0	1.85 ± 0.15	28.00 ± 3.00	0.45 ± 0.05	mm
FRN14	0.236 + 0.020	0.091 + 0.008	1.102 + 0.118	0.022 + 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			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	FRN14, FRN12	2,000	
		1	1W						FRN1	1,000	
		1	1W						FRN2	500	
		2	2W						FRN16	2,000	
		2	2W				B	Bulk	FRN14, FRN12	1,000	
		2	2W						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	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		
		1/2	0.5W				FRN2	1,000		
		1	1W				FRN16	5,000	ammo	T
		1	1W				FRN14, FRN12	2,000		
		1	1W				FRN1	1,000		
		2	2W				FRN2	500	bulk	A
		2	2W				FRN16	2,000		
		2	2W				FRN14, FRN12	1,000		
		2	2W				FRN1, FRN2			