



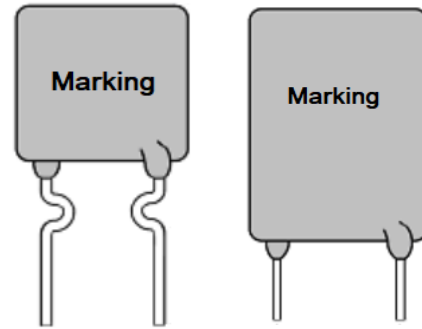
**Product Features:** Low resistance, High hold current,  
Solid state, Radial leaded product  
ideal for up to 30V<sub>DC</sub>

**Operation Current:** 0.9A~9.0A

**Maximum Voltage:** 30V<sub>DC</sub>

**Temperature Range :** -40°C to 85°C

**Applications:** Wide variety of electronic equipment



Lead Size: 24AWG

Lead Size: 20AWG

**Electrical Characteristics (23°C)**

Part Number	Hold Current I <sub>H</sub> , A	Trip Current I <sub>T</sub> , A	Rated Voltage V <sub>MAX</sub> , V <sub>DC</sub>	Max Current I <sub>MAX</sub> , A	Typical Power Pd, W	Max Time to Trip at 5xI <sub>H</sub> , s	Resistance	
							R <sub>MIN</sub> Ohms	R <sub>1MAX</sub> Ohms
FRU090-30	0.90	1.80	30	100	0.6	5.9	0.070	0.220
FRU110-30	1.10	2.20	30	100	0.7	6.6	0.050	0.170
FRU135-30	1.35	2.70	30	100	0.8	7.3	0.040	0.130
FRU160-30	1.60	3.20	30	100	0.9	8.0	0.030	0.110
FRU185-30	1.85	3.70	30	100	1.0	8.7	0.020	0.090
FRU250-30	2.40	5.00	30	100	1.2	10.3	0.020	0.070
FRU300-30	3.00	6.00	30	100	2.0	10.8	0.010	0.080
FRU400-30	4.00	8.00	30	100	2.5	12.7	0.010	0.050
FRU500-30	5.00	10.00	30	100	3.0	14.5	0.005	0.050
FRU600-30	6.00	12.00	30	100	3.5	16.0	0.005	0.040
FRU700-30	7.00	14.00	30	100	3.8	17.5	0.005	0.030
FRU800-30	8.00	16.00	30	100	4.0	18.8	0.005	0.020
FRU900-30	9.00	18.00	30	100	4.0	20.0	0.005	0.020

I<sub>H</sub>=Hold current-maximum current at which the device will not trip at 23°C still air.  
I<sub>T</sub>=Trip current-minimum current at which the device will always trip at 23°C still air.  
V<sub>MAX</sub>=Maximum voltage device can withstand without damage at its rated current.  
I<sub>MAX</sub>= Maximum fault current device can withstand without damage at rated voltage (V MAX).  
Pd=Typical power dissipated from device when in tripped state in 23°C still air environment.  
R<sub>MIN</sub>=Minimum device resistance at 23°C  
R<sub>1MAX</sub>=Maximum device resistance at 23°C, 1 hour after tripping .

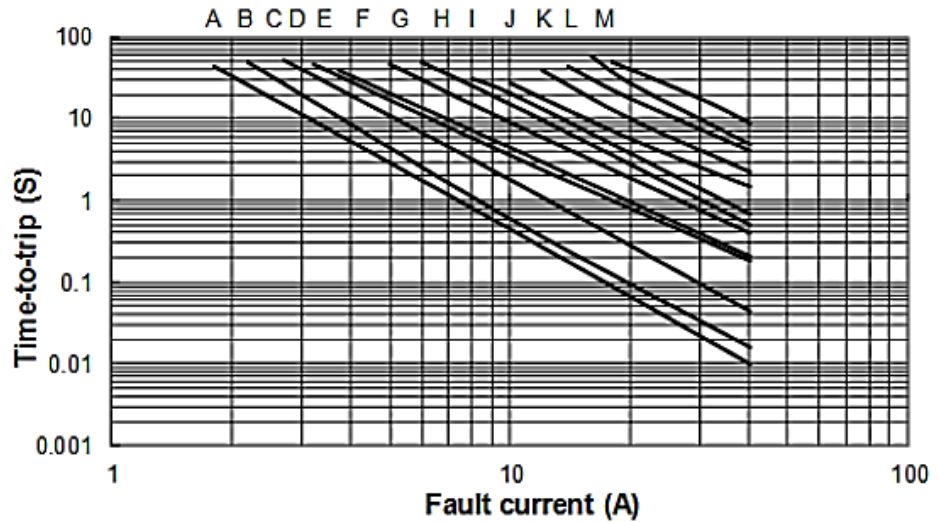
**Thermal Derating for PPTC Device at Various Ambient Temperatures**

Temperatures	-40°C	-20°C	0°C	23°C	30°C	40°C	50°C	60°C	70°C	85°C
Current Derating %	145%	130%	115%	100%	92%	85%	78%	80%	62%	50%

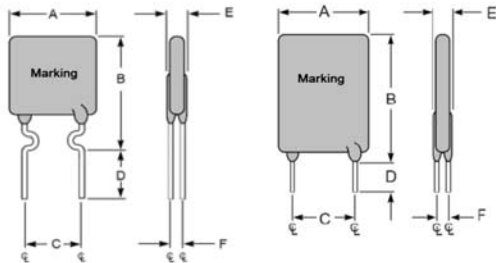


### Typical Time-To-Trip at 23°C

- A = FRU090-30
- B = FRU110-30
- C = FRU135-30
- D = FRU160-30
- E = FRU185-30
- F = FRU250-30
- G = FRU300-30
- H = FRU400-30
- I = FRU500-30
- J = FRU600-30
- K = FRU700-30
- L = FRU800-30
- M = FRU900-30



### Product Dimensions (Millimeters)



FRU090-FRU250  
Lead Size: 24AWG  
Φ 0.51mm Diameter

FRU300-FRU900  
Lead Size: 20AWG  
Φ 0.81mm Diameter

Part Number	A	B	C	D	E	F
	Max	Max	Typ	Min	Max	Typ
FRU090-30	7.4	12.2	5.1	7.6	3.0	0.9
FRU110-30	7.4	14.2	5.1	7.6	3.0	0.9
FRU135-30	8.9	13.5	5.1	7.6	3.0	0.9
FRU160-30	8.9	15.2	5.1	7.6	3.0	0.9
FRU185-30	10.2	15.7	5.1	7.6	3.0	0.9
FRU250-30	11.4	18.3	5.1	7.6	3.0	0.9
FRU300-30	11.4	17.3	5.1	7.6	3.0	1.2
FRU400-30	14.0	20.1	5.1	7.6	3.0	1.2
FRU500-30	14.0	24.9	10.2	7.6	3.0	1.2
FRU600-30	16.5	24.9	10.2	7.6	3.0	1.2
FRU700-30	19.1	26.7	10.2	7.6	3.0	1.2
FRU800-30	21.6	29.2	10.2	7.6	3.0	1.2
FRU900-30	24.1	29.7	10.2	7.6	3.0	1.2

#### Terminal Pad Materials:

Tin-Plated copper clad steel  
FRU090-250 : 24 AWG  
FRU300-900 : 20 AWG

#### Terminal Pad Solderability:

MIL-STD-202, Method 208E  
Flame retardant epoxy, meet UL-94V-0 requirement