

Summary

- RoHS Compliant (Lead Free) Product
- Applications: Wide variety of electronic equipment
- Product Features: Low resistance, High hold current, Solid state, Radial leaded product ideal for up to 30VDC
- Operation Current: 0.9A~9.0A
- Maximum Voltage: 30VDC
- Temperature Range : -40to 85

Agency Recognition

UL: File No. E211981
 C-UL: File No. E211981
 TÜV: File No. R50004084

Electrical Characteristics (23°C)

Part Number	Hold Current	Trip Current	Max.Time To Trip	Maximum Current	Rated Voltage	Typical Power	Resistance	
							R _{MIN}	R _{1MAX}
	I _H , A	I _T , A	at 5xI _H ,s	I _{MAX} , A	V _{MAX} , V _{DC}	P _d , W	Ohms	Ohms
TRU090-30F	0.90	1.80	5.9	100	30	0.6	0.070	0.220
TRU110-30F	1.10	2.20	6.6	100	30	0.7	0.050	0.170
TRU135-30F	1.35	2.70	7.3	100	30	0.8	0.040	0.130
TRU160-30F	1.60	3.20	8.0	100	30	0.9	0.030	0.110
TRU185-30F	1.85	3.70	8.7	100	30	1.0	0.030	0.090
TRU250-30F	2.50	5.00	10.3	100	30	1.2	0.020	0.070
TRU300-30F	3.00	6.00	10.8	100	30	2.0	0.020	0.080
TRU400-30F	4.00	8.00	12.7	100	30	2.5	0.010	0.050
TRU500-30F	5.00	10.00	14.5	100	30	3.0	0.010	0.050
TRU600-30F	6.00	12.00	16.0	100	30	3.5	0.005	0.040
TRU700-30F	7.00	14.00	17.5	100	30	3.8	0.005	0.030
TRU800-30F	8.00	16.00	18.8	100	30	4.0	0.005	0.020
TRU900-30F	9.00	18.00	20.0	100	30	4.2	0.005	0.020

I_H=Hold current-maximum current at which the device will not trip at 23°C still air.

I_T=Trip current-minimum current at which the device will always trip at 23°C still air.

V_{MAX}=Maximum voltage device can withstand without damage at its rated current.

I_{MAX}= Maximum fault current device can withstand without damage at rated voltage (V_{MAX}).

P_d=Typical power dissipated from device when in tripped state in 23°C still air environment.

R_{MIN}=Minimum device resistance at 23°C.

R_{1MAX}=Maximum device resistance at 23°C, 1 hour after tripping.

Physical specifications:

Lead material: TRU090-30F~TRU250-30F Tin plated copper, 24 AWG.

TRU300-30F~TRU900-30F Tin plated copper, 20 AWG.

Soldering characteristics:MIL-STD-202, Method 208E.

Insulating coating:Flame retardant epoxy, meets UL-94V-0 requirement.

NOTE : Specification subject to change without notice.

Production Dimensions (millimeter)

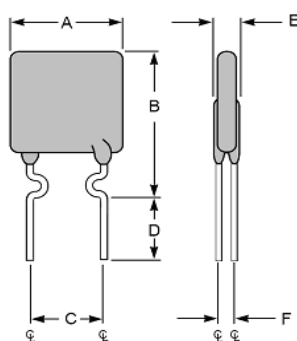


Fig.1
Lead Size: 24AWG
Φ 0.51 mm Diameter

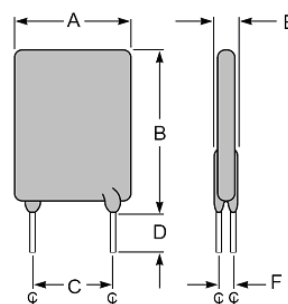
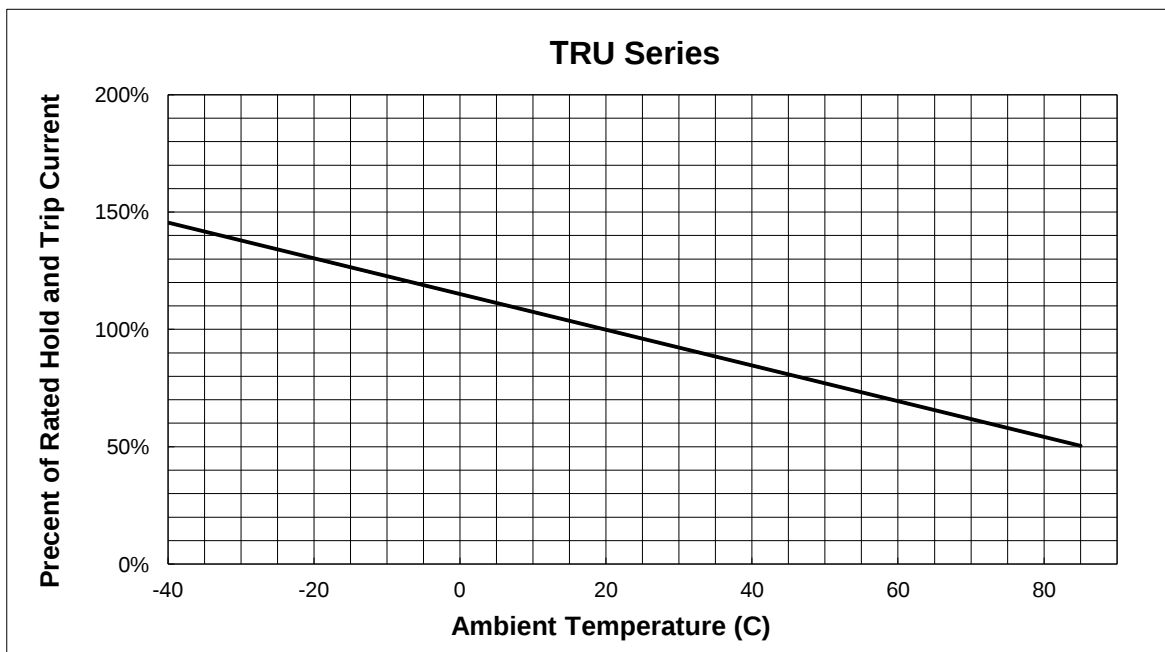


Fig.2
Lead Size: 20AWG
Φ 0.81 mm Diameter

Part Number	Fig	A	B	C	D	E	F
		Maximum	Maximum	Typical	Minimum	Maximum	Typical
TRU090-30F	1	7.4	12.2	5.1	7.6	3.0	0.9
TRU110-30F	1	7.4	14.2	5.1	7.6	3.0	0.9
TRU135-30F	1	8.9	13.5	5.1	7.6	3.0	0.9
TRU160-30F	1	8.9	15.2	5.1	7.6	3.0	0.9
TRU185-30F	1	10.2	15.7	5.1	7.6	3.0	0.9
TRU250-30F	1	11.4	18.3	5.1	7.6	3.0	0.9
TRU300-30F	2	11.4	17.3	5.1	7.6	3.0	1.2
TRU400-30F	2	14.0	20.1	5.1	7.6	3.0	1.2
TRU500-30F	2	14.0	24.9	10.2	7.6	3.0	1.2
TRU600-30F	2	16.5	24.9	10.2	7.6	3.0	1.2
TRU700-30F	2	19.1	26.7	10.2	7.6	3.0	1.2
TRU800-30F	2	21.6	29.2	10.2	7.6	3.0	1.2
TRU900-30F	2	24.1	29.7	10.2	7.6	3.0	1.2

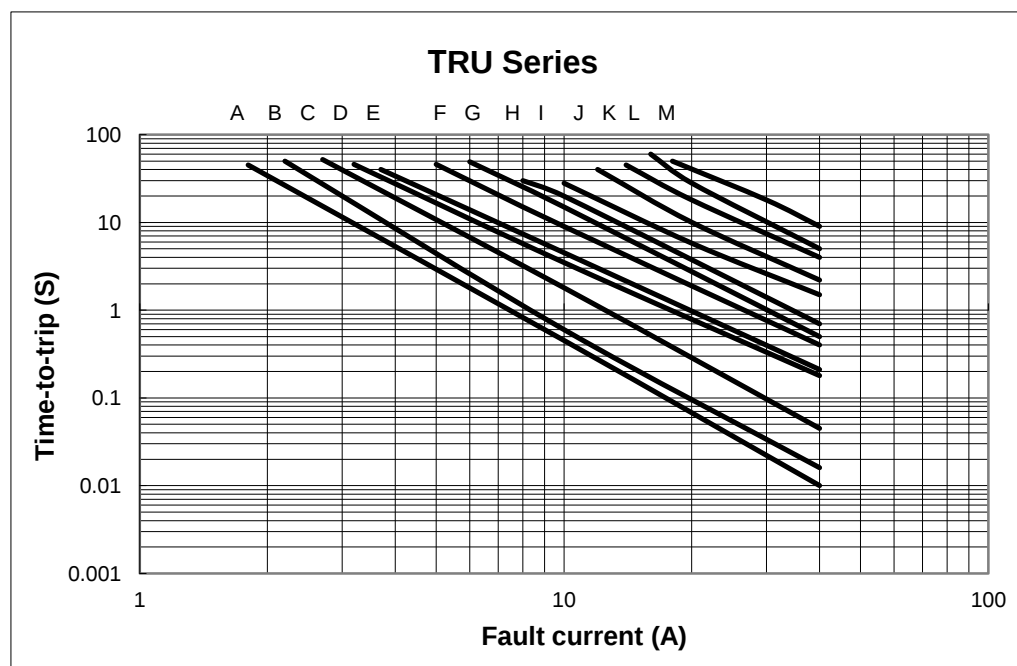
Thermal Derating Curve



NOTE : Specification subject to change without notice.

Typical Time -To-Trip at 23°C

- A =TRU090-30F
- B =TRU110-30F
- C =TRU135-30F
- D =TRU160-30F
- E =TRU185-30F
- F =TRU250-30F
- G =TRU300-30F
- H =TRU400-30F
- I = TRU500-30F
- J = TRU600-30F
- K =TRU700-30F
- L =TRU800-30F
- M =TRU900-30F



Material Specification

Lead material : TRU090-30F~TRU250-30F Tin plated copper, 24 AWG.

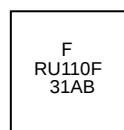
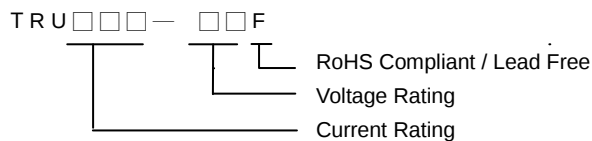
TRU300-30F~TRU900-30F Tin plated copper, 20 AWG.

Soldering characteristics: MIL-STD-202, Method 208E.

Insulating coating: Flame retardant epoxy, meets UL-94V-0 requirement.

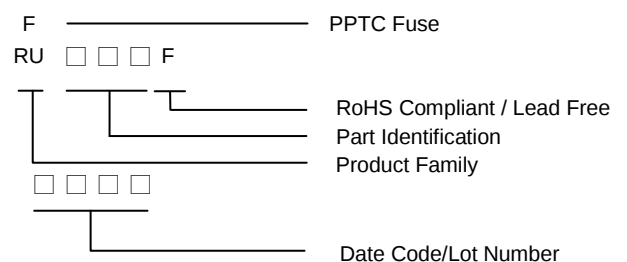
Part Numbering and Marking System

Part Numbering System



Example

Part Marking System



Note: Font on Marking may look slightly different due to fine turnings of each Marking printer.

Warning: -Operation beyond the specified maximum ratings or improper use may result in damage and possible electrical arcing and/or flame.



- PPTC device are intended for occasional overcurrent protection. Application for repeated overcurrent condition and/or prolonged trip are not anticipated.
- Avoid contact of PPTC device with chemical solvent. Prolonged contact will damage the device performance.

NOTE : Specification subject to change without notice.