

**Specification Status: Released**

**Electrical Rating**

**Voltage: 33V MAX**  
**Current: 40A MAX**

**Insulating Material:**

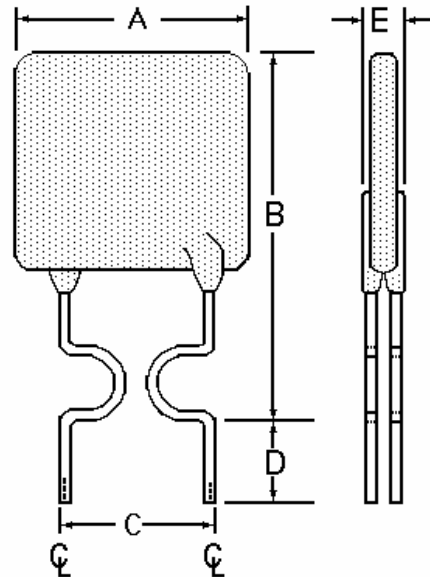
Cured, Flame Retardant Epoxy Polymer  
 Meets UL94 V-0 Requirements

**Lead Material:**

24 AWG Tin Plated Copper Clad Steel

**Marking:**

- Raychem Logo and Voltage
- XX 33
- TF190 — Part Identification
- — Lot Identification (can be on back)



**TABLE I. DIMENSIONS:**

	A		B		C		D		E	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
mm:	--	8.9	--	13.5	4.3	5.8	7.6	--	--	3.0
in*:	--	(0.35)	--	(0.53)	(0.17)	(0.23)	(0.30)	--	--	(0.12)

\*Rounded off approximation

**TABLE II. PERFORMANCE RATINGS:**

I HOLD RATED CURRENT*	CURRENT RATINGS		INITIAL RESISTANCE VALUES		TIME TO TRIP	R <sub>1</sub> MAX 1 HR. POST TRIP RESISTANCE STANDARD TRIP	TRIPPED-STATE POWER DISSIPATION
	AMPS AT 20°C HOLD	AMPS AT 20°C HOLD   TRIP	OHMS AT 20°C MIN   MAX		SECONDS AT 20°C, 9.5A MAX	SECONDS AT 20°C MAX	WATTS AT 20°C TYP
1.90	1.90	3.0	0.045	0.063	3.5	0.092	0.90

\* Values specified were determined using PCB's w/ 0.050 x 1 oz Cu traces

Agency Recognitions:  
 Reference Documents:  
 Precedence:  
 Effectivity:  
 CAUTION:

UL, CSA, TUV  
 PS300  
 This specification takes precedence over documents referenced herein.  
 Reference documents shall be the issue in effect on the date of invitation for bid.  
 Operation beyond the rated voltage or current may result in rupture, electrical arcing or flame.

**Materials Information**

**ROHS Compliant**

**ELV Compliant**

**Pb-Free**

Directive 2002/95/EC Compliant

Directive 2000/53/EC Compliant

