



TECHFUSE

SEA & LAND ELECTRONIC CORP.

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ALPHA-TOP TECHNOLOGY CORP.

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APPROVAL SHEET

MODEL NO.: R72-185

CUSTOMER:

CUSTOMER'S APPROVAL:

AUTHORIZED SIGNATURE/STAMP:

DATE

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Submitted by:

Chen

Approved by:

YC Lin

DATE:

11-May-22



R72-185

Features

- Radial Leaded Devices
- Cured, flame retardant epoxy polymer insulating material meets UL 94V-0 requirements
- Bulk packaging, or tape and reel available on most models

Applications

- Almost anywhere there is a low voltage power supply, up to 60V and a load to be protected, including:
- Industrial controls
- Automotive electronics
- Medical products

Alpha-Top (Sea & Land Alliance)

Electrical Properties

Model	V _{max} (Vdc)	I _{max} (A)	I _{hold} (A)	I _{trip} (A)	P _d Typ. (W)	Maximum Time To Trip		Resistance		Agency Approval	
						Current (A)	Time (Sec)	R _{min} (Ω)	R _{1max} (Ω)	UL	TUV
R72-185	72	40	1.85	3.70	2.10	9.25	12.6	0.06	0.19		

I_{hold} = Hold Current : maximum current device will sustain for 4 hours without tripping in 25°C still air.
I_{trip} = Trip Current : minimum current at which the device will trip in 25°C still air.
V_{max} = Maximum voltage device can withstand without damage at rated current (I_{max}).
I_{max} = Maximum fault current device can withstand without damage at rated voltage (V_{max}).
P_d = Power dissipated from device when in the tripped state at 25°C still air.
R_i min/max = Minimum/Maximum resistance of device in initial (un-soldered) state.
R_{1 max} = Maximum resistance of device at 25°C measured one hour after tripping.
CAUTION : Operation beyond the specified ratings may result in damage and possible arcing and flame.

Environmental Specifications

Test	Conditions	Resistance change
Passive aging	+85°C, 1000 hrs	±5% typical
Humidity aging	+85°C, 85% R.H., 1000 hrs	±5% typical
Thermal shock	+85°C to -40°C, 20 times	±10% typical
Resistance to solvent	MIL-STD-202, Method 215	No change
Vibration	MIL-STD-202, Method 201	No change
Ambient operating /storage conditions : - 40 °C to +85 °C		
Maximum surface temperature of the device in the tripped state is 125 °C		
In case of special use, please contact our engineer		

Agency Approvals :

Regulation/Standard:



2015/863/EU



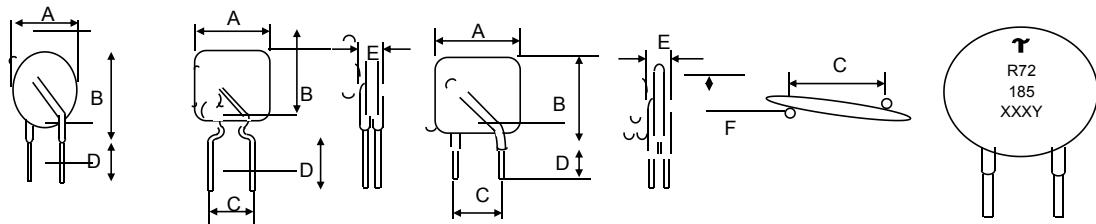
EN14582

WARNING:

- Use PPTC beyond the maximum ratings or improper use may result in device damage and possible electrical arcing and flame.
- PPTC are intended for protection against occasional over current or over temperature fault conditions and should not be used when repeated fault conditions or prolonged trip events are anticipated.
- Device performance can be impacted negatively if devices are handled in a manner inconsistent with recommended electronic, thermal, and mechanical procedures for electronic components.
- Use PPTC with a large inductance in circuit will generate a circuit voltage (L di/dt) above the rated voltage of the PPTC.
- Avoid impact PPTC device its thermal expansion like placed under pressure or installed in limited space.

Physical Dimensions (Unit: mm/inch)

Model	A Max.	B Max.	C Typ.	D Min.	E Max.	F Max.	Lead Style
R72-185	17.8	22.9	5.1	7.6	3.1	1.2	Straight

Dimensions

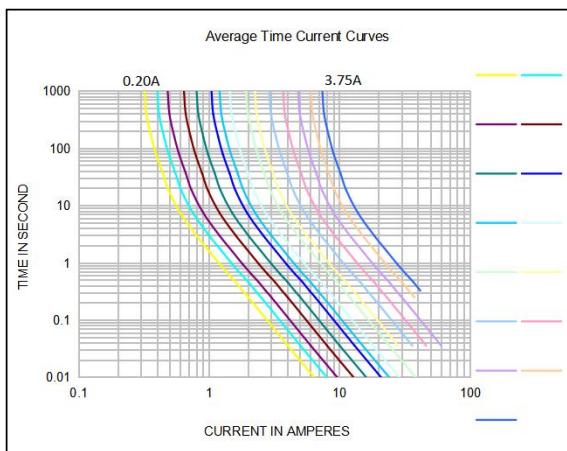
T = Trademark
R72 = Radial type 72 Vrms
185 = 1.85A hold current
XXX = code
Y = Factory code

Physical Characteristics**Lead Material :**

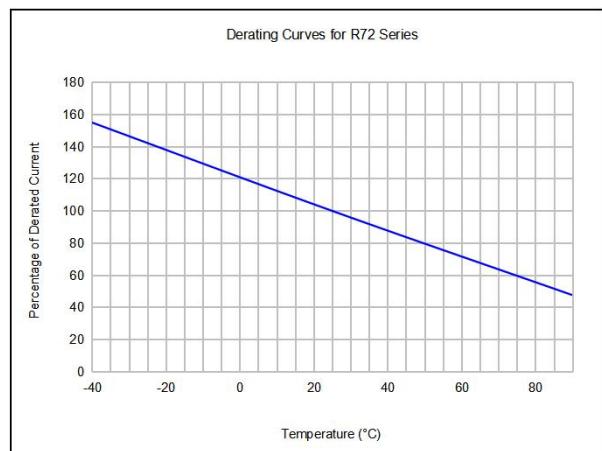
R72-110 ~ 375: Tin-plated copper , 0.52mm² (20AWG), Φ 0.81mm(0.032 in).

Lead Solderability : MIL-STD-202, Method 208E

Typical time-to-trip curve at 25°C



Thermal derating curve

 I_{hold} versus temperature

Model	Maximum ambient operating temperature (T_{max}) vs. hold current (I_{hold})								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
R72-185	2.78	2.52	2.20	1.85	1.50	1.33	1.17	1.00	0.74

Order information

R72	135	K or S	R or U	Packing		
				Model	Reel Q'ty	Bag Q'ty
Radial type 72 V	Hold Current 1.85A	K=Kink leads S=Straight leads	R= Tape & Reel U= Bulk packaged	R72-185		500

Tape & Reel packaging per EIA468-B standard.

Labeling Information

