



SEA & LAND ELECTRONIC CORP.

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ALPHA-TOP TECHNOLOGY CORP.

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## APPROVAL SHEET

MODEL NO.: R72-135

CUSTOMER:

CUSTOMER'S APPROVAL:

AUTHORIZED SIGNATURE/STAMP:

DATE

### MANUFACTURER:

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Submitted by: Chen  
Approved by: YC Lin  
DATE: 4-Mar-22



## R72-135

### 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	$V_{max}$	$I_{max}$	$I_{hold}$	$I_{trip}$	$P_d$	Maximum Time To Trip		Resistance		Agency Approval	
	(Vdc)	(A)	(A)	(A)	Typ. (W)	Current (A)	Time (Sec)	Rimin ( $\Omega$ )	R1max ( $\Omega$ )	UL	TUV
R72-135	72	40	1.35	2.70	1.70	6.75	9.6	0.10	0.30		

**I<sub>hold</sub>** = Hold Current : maximum current device will sustain for 4 hours without tripping in 25°C still air.  
**I<sub>trip</sub>** = Trip Current : minimum current at which the device will trip in 25°C still air.  
**V<sub>max</sub>** = Maximum voltage device can withstand without damage at rated current ( $I_{max}$ ).  
**I<sub>max</sub>** = Maximum fault current device can withstand without damage at rated voltage ( $V_{max}$ ).  
**P<sub>d</sub>** = Power dissipated from device when in the tripped state at 25°C still air.  
**R<sub>i min/max</sub>** = Minimum/Maximum resistance of device in initial (un-soldered) state.  
**R<sub>1 max</sub>** = 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



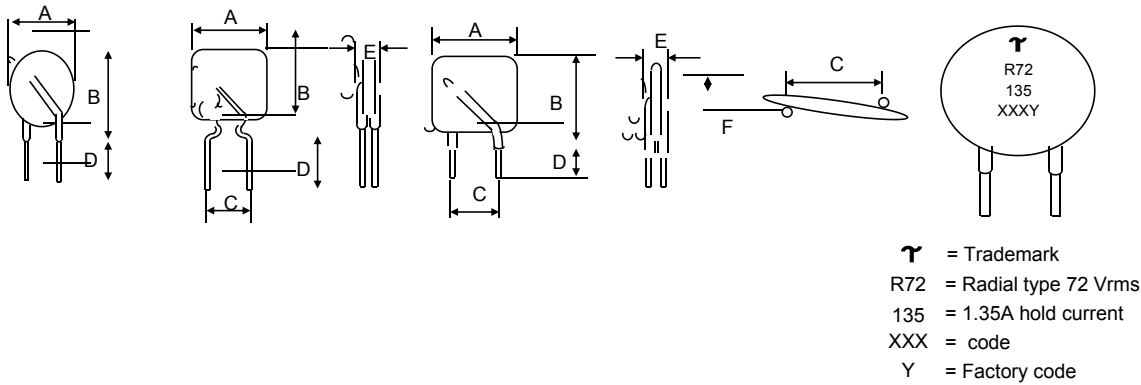
### WARNING:

- 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
R72-135	14.5	19.6	5.1	7.6	3.1	1.2	Straight

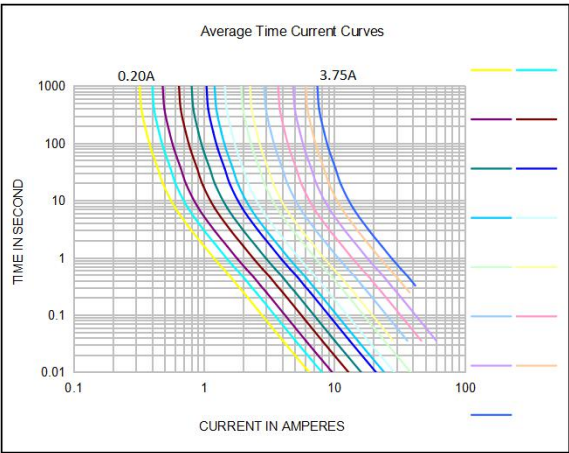
Dimensions



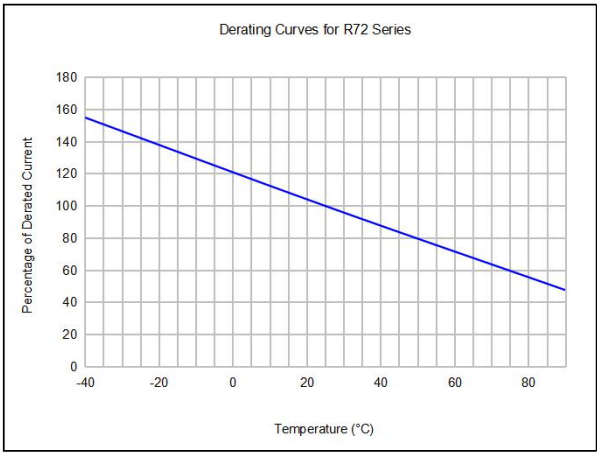
Physical Characteristics

**Lead Material :**  
 R72-110 ~ 375: Tin-plated copper , 0.52mm<sup>2</sup> (20AWG), Φ0.81mm(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 ( $T_{mao}$ ) vs. hold current ( $I_{hold}$ )								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
R72-135	2.09	1.84	1.61	1.35	1.09	0.97	0.85	0.73	0.54

Order information

R72	135	K or S	R or U	Packing
Radial type	Hold	K=Kink leads	R= Tape &	Model R72-135
72 V	Current	S=Straight	Reel	
	1.35A	leads	U= Bulk packaged	
				Reel Q'ty 500

Tape & Reel packaging per EIA468-B standard.

Labeling Information



Sea & Land Electronic Corp.

HF

Pb

RoHS

Model:  
Part no.:  
Spec.:  
Lot no.:  
Q'ty:

倉儲：密封！溫度：18~33°C/濕度：30~60% A