



SEA & LAND ELECTRONIC CORP.

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ALPHA-TOP TECHNOLOGY CORP.

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## APPROVAL SHEET

MODEL NO.:	R16-090
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CUSTOMER:
CUSTOMER'S APPROVAL:
AUTHORIZED SIGNATURE/STAMP:
DATE

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Submitted by:	Chung Cheng
Approved by:	YC Lin
DATE:	9-Apr-13



R16-090

**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 16V and a load to be protected, including:
- Personal computer
  - Medical electronics
  - Personal care product

Alpha-Top (Sea & Land Alliance)

Model	V <sub>max</sub> (Vdc)	I <sub>max</sub> (A)	I <sub>hold</sub> (A)	I <sub>trip</sub> (A)	P <sub>d</sub> Typ. (W)	Maximum Time To Trip		Resistance			Agency Approval	
						Current (A)	Time (Sec)	R <sub>i</sub> min (Ω)	R <sub>i</sub> max (Ω)	R <sub>1</sub> max (Ω)	UL	TUV
R16-090	16	100	0.90	1.80	0.60	8.00	1.2	0.070	0.1200	0.180		

**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<sub>max</sub>).

**I<sub>max</sub>** = Maximum fault current device can withstand without damage at rated voltage (V<sub>max</sub>).

**P<sub>d</sub>** = Power dissipated from device when in the tripped state at 25°C still air.

**R<sub>i</sub> min/max** = Minimum/Maximum resistance of device in initial (un-soldered) state.

**R<sub>1</sub> 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		

Agency Approvals :

UL pending

Regulation/Standard:



2002/95/EC



EN14582

**PHYSICAL SPECIFICATIONS :**

**Materials : Leads**

Tin plated copper-clad steel, 24 AWG (0.51mm/0.020" Dia.)

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

**Device Labeling :** Device is marked with Logo, amperage rating , voltage rating & date code.

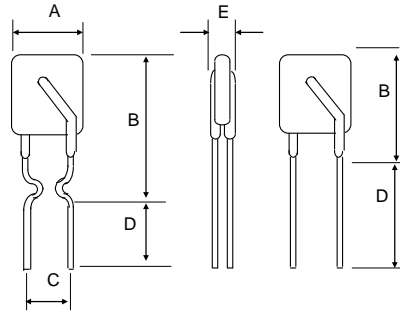


**WARNING:**

- 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.

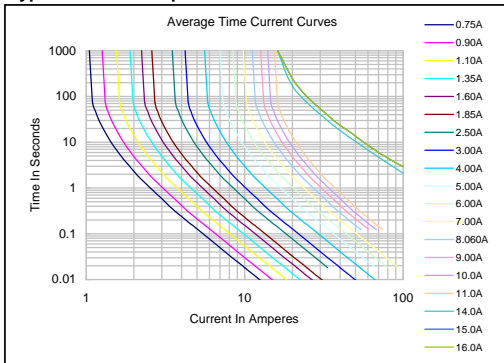
Physical Dimensions (Unit: mm)

Model	A	B	C	D	E	Lead Style
	Max.	Max.	Typ.	Min.	Max.	
R16-090	7.40	12.20	5.10	7.6	3	Kink

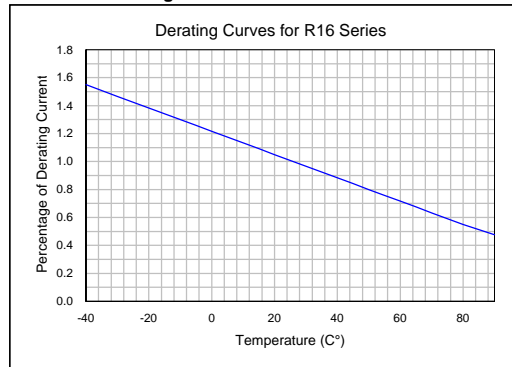


Note : Stand-offs only used for R16-090 - R16-250

Typical Time-To-Trip Curve at 25°C



Thermal Derating Curve



Packing :

Model	Reel QTY	Bag QTY
R16-090	3000	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℃/濕度：30~60% A