



SEA & LAND ELECTRONIC CORP.

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ALPHA-TOP TECHNOLOGY CORP.

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## APPROVAL SHEET

MODEL NO.: R30-040

CUSTOMER:

CUSTOMER'S APPROVAL:

AUTHORIZED SIGNATURE/STAMP:

DATE

MANUFACTURER:

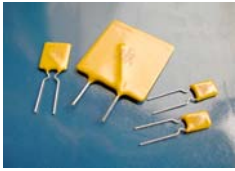
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Submitted by: Chung Cheng  
Approved by: YC Lin  
DATE: 10-Jan-13



**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

R30-040

Alpha-Top (Sea & Land Alliance)

**Electrical Properties**

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>min</sub> (Ω)	R <sub>imax</sub> (Ω)	R <sub>1max</sub> (Ω)	UL	TUV-PS
R30-040	30	40	0.40	0.80	0.45	8.00	0.3	0.250	0.430	0.645		

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

Agency Approvals :

UL pending

Regulation/Standard:



2002/95/EC

EN14582

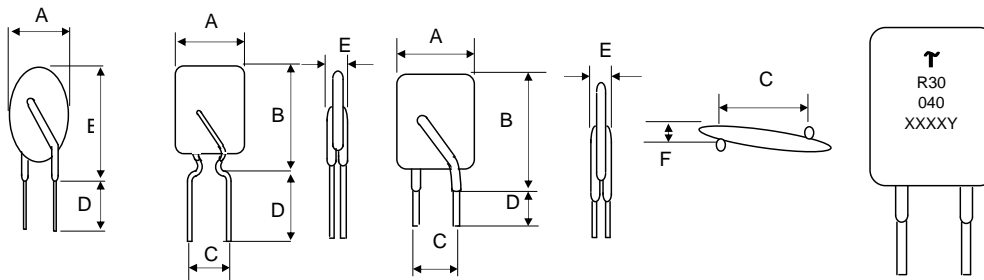
**! WARNING:**

- 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
R30-040	7.4/0.29	11.4/0.45	5.1/0.20	7.6/0.3	3.0/0.12	1.2/0.05	Straight

Dimensions



- ♣ = Trademark
- R30 = Radial type 30 Vrms
- 040 = 0.40A hold current
- XXXX = Date code
- Y = Factory code

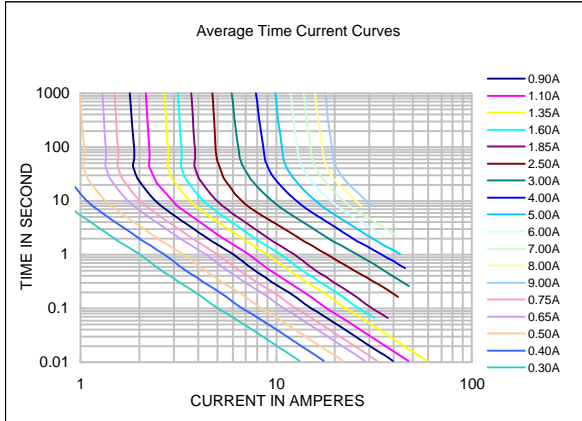
Physical Characteristics

Lead Material :

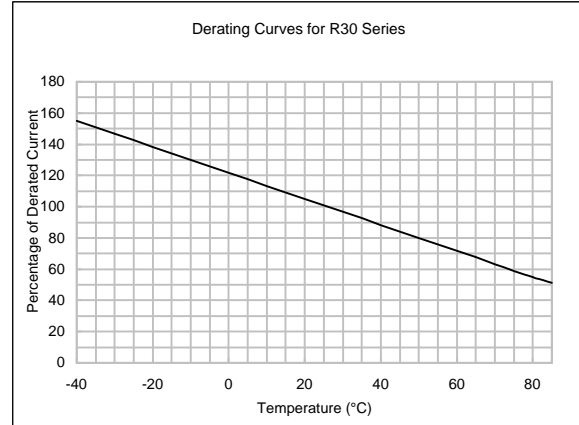
R30-040 : Tin-plated copper-clad steel, 0.205mm<sup>2</sup> (24AWG),  $\Phi$ 0.51mm(0.020 in).

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
R30-040	0.58	0.52	0.46	0.40	0.33	0.31	0.27	0.24	0.21

Order information

Packing

R30	040	K or S	R or U	Model	Reel Q'ty	Bag Q'ty
Radial type 30 V	Hold Current 0.40A	K= Kink leads  S= Straight leads	R=Tape&reel U= Bulk packaged	R30-040	-	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