SEA & LAND ELECTRONIC CORP.
WWW.SEALAND-PPTC.COM

ALPHA-TOP TECHNOLOGY CORP.
WWW.ALPHA-TOP.CN

APPROVAL SHEET

MODEL NO.： R60-500

CUSTOMER：

CUSTOMER'S APPROVAL：

AUTHORIZED SIGNATURE/STAMP：

DATE

MANUFACTURER:

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Submitted by:	Chen
Approved by:	YC Lin
DATE:	16-Mar-22

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

R60-500

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 Current (A)	Maximum Time To Trip Time (Sec)	Resistance Rimin (Ω)	Resistance R1max (Ω)	Agency Approval UL	Agency Approval TUV-PS
R60-500	60	40	5.00	10.00	3.20	15.00	25.00	0.020	0.060		

Ihold = Hold Current : maximum current device will sustain for 4 hours without tripping in 25°C still air.
Itrip = 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}).
Pd = Power dissipated from device when in the tripped state at 25°C still air.
Ri min/max = Minimum/Maximum resistance of device in initial (un-soldered) state.
R1 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
Passive aging	+85°C, 1000 hrs
Humidity aging	+85°C, 85% R.H.,1000 hrs
Thermal shock	+85°C to -40°C, 20 times
Resistance to solvent	MIL-STD-202,Method 215
Vibration	MIL-STD-202,Method 201
Ambient operating /storage conditions : - 40 °C to +85 °C	
Maximum surface temperature of the device in the tripped state is 125 °C	

Agency Approvals :

Regulation/Standard: Pb RoHS **2015/863/EU**

HF **EN14582**

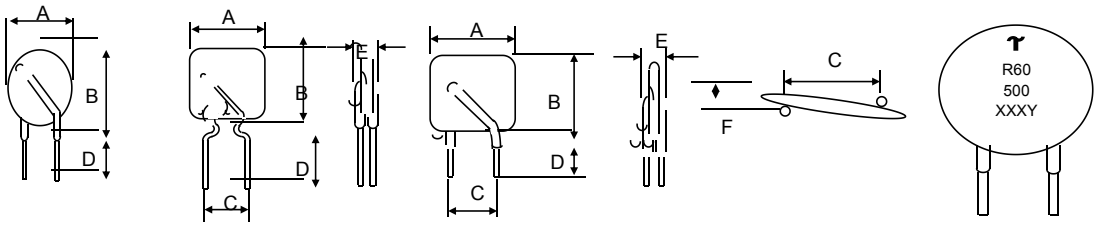
WARNING:

· 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
R60-500	28.5	33.5	10.2	7.6	3.1	2.0	Straight

Dimensions



™ = Trademark
R60 = Radial type 60 Vrms
500 = 5.00A hold current
XXX = Date code
Y = Factory code

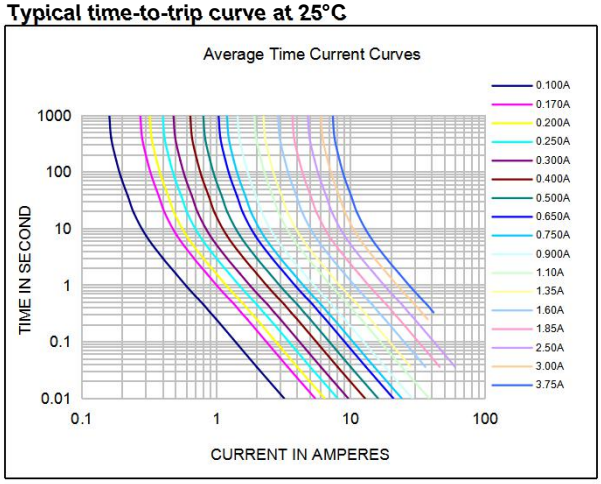
Physical Characteristics

Lead Material :

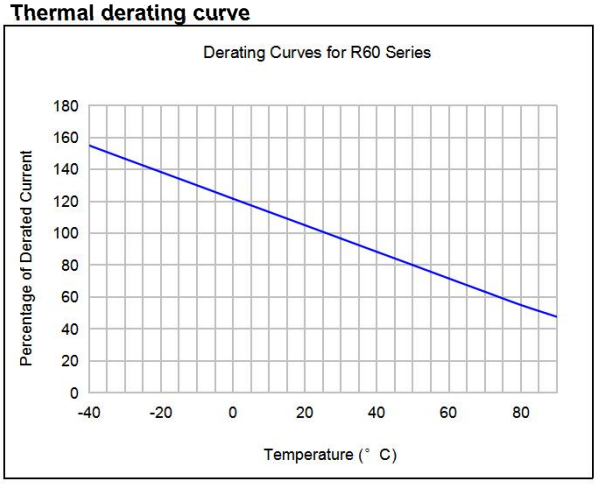
R60-500: Tin-plated copper , 0.52mm^2 (20AWG), Φ0.81mm(0.032 in).

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
R60-500	7.75	6.75	5.95	5.00	4.05	3.60	3.15	2.70	2.00

Order information

R60	500	K or S	R or U
Radial type 60 V	Hold Current 5.00A	K=Kink leads S=Straight leads	R= Tape & Reel U= Bulk packaged

Packing

Model	Reel Q'ty	Bag Q'ty
R60-500	-	500

Tape & Reel packaging per EIA468-B standard.

Labeling Information