



SEA & LAND ELECTRONIC CORP.

www.sealand-pptc.com



ALPHA-TOP TECHNOLOGY CORP.

www.alpha-top.cn

APPROVAL SHEET

MODEL NO.: R16-500

CUSTOMER:

CUSTOMER'S APPROVAL:

AUTHORIZED SIGNATURE/STAMP:

DATE

MANUFACTURER:

HEAD OFFICE:

13F.,No.120-10,Sec.3,Zhongshan Rd.,Zhonghe Dist.,New Taipei City 23544,Taiwan
Tel: 886-2-8221-2567
Fax:882-2-2225-7268
E-mail:service@chipfast.com.tw

China Branch:

Factory Building B)Shuangpeng,Weibu Village, Qiuchang Town,
Huiyang District, Huizhou City, Guangdong Province, P.R.C.)
Tel: 86-752-3562001
Fax:86-752-3558696
E-mail:service@atppc.com

Submitted by:

Chen

Approved by:

YC Lin

DATE:

16-Oct-23

SEA & LAND ELECTRONIC CORP.



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

R16-500

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		Resistance		Agency Approval	
						Current (A)	Time (Sec)	R _i _{min} (Ω)	R _i _{max} (Ω)	UL	TUV
R16-500	16	100	5.00	8.50	2.60	15.00	10.0	0.014	0.044		

I_{hold} = Hold Current. Maximum current device will not trip in 25°C still air.

I_{trip} = Trip Current. Minimum current at which the device will always trip in 25°C still air.

V_{max} Operating = Maximum operating voltage (Vdc) device can withstand without damage at rated current.

V_{max} Interrupt = Maximum interrupt voltage(Vac) device can withstand without damage at rated current .

I_{max} = Maximum fault current device can withstand without damage at rated voltage (V_{max}).

R_i_{min/max} = Minimum/Maximum device resistance prior to tripping at 25°C

R_i_{max} = Maximum device resistance one hour after it is tripped at 25°C.

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
In case of special use,please contact our engineer	

Agency Approvals :

Regulation/Standard:



2015/863/EU



EN14582

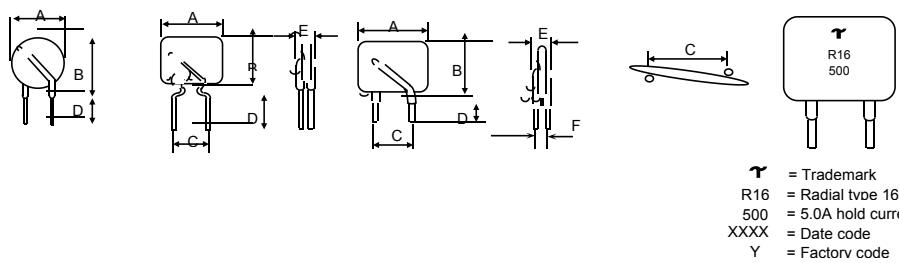
⚠ WARNING:

- 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
R16-500	10.20	15.70	5.10	7.6	3.0	1.7	Straight

Dimensions



Physical Characteristics

Lead Material :

R16-090 ~ 250: Tin-plated copper-clad steel, 0.205mm² (24AWG), Φ 0.51mm(0.020 in).
 R16-300 ~ 1100: Tin-plated copper, 0.52mm² (20AWG), Φ 0.81mm(0.032 in).
 R16-1100 ~ 1600: Tin-plated copper, 0.79mm² (20AWG), Φ 1.0mm(0.039 in).

Lead Solderability : MIL-STD-202, Method 208

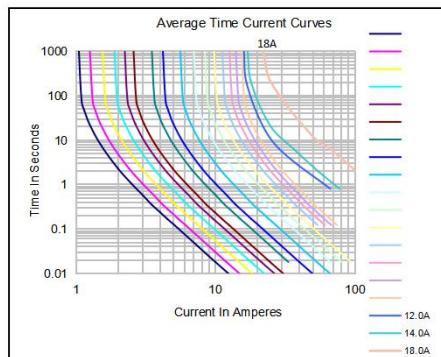
0	7.40	10.20	5.10	7.60	3.00	3.00	1.2	Straight
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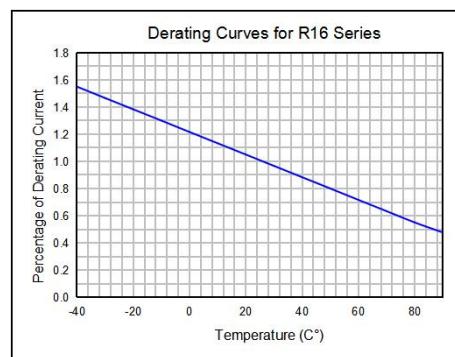
R16-500

Alpha-Top (Sea & Land Alliance)

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
R16-500	7.30	6.60	6.00	5.00	4.25	3.85	3.60	2.95	2.25

Packing :

Model	Reel QTY	Bag QTY
R16-500		1000

Tape & Reel packaging per EIA468-B standard.

Labeling Information

