SINLOON®

PPTC Resettable Fuse

MRA160-120F

1. Summary

(a) **RoHS Compliant (Lead Free) product**
(b) **Applications : Wide variety of electronic equipment**
(c) **Product Features : Solid state, Radial leaded product ideal for up to 120VAC/VDC**
(d) **Operation Current : 1.60A**
(e) **Maximum Voltage : 120VAC/VDC**
(f) **Temperature Range : -40℃ to 85℃**

2. Agency Recognition

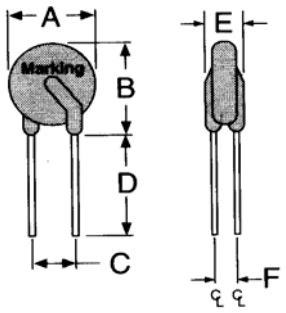
UL : File No. Pending
C-UL: File No. Pending
TÜV: File No. Pending

3. Electrical Characteristics (23℃)

Part Number	Hold Current	Trip Current	Max.Time to Trip	Maximum Current	Rated Voltage	Typical Power	Resistance Tolerance	
							RMIN	R1MAX
	IH, A	IT, A	at 5xIH	IMAX, A	VMAX,V	Pd, W	ohms	ohms
MRA160-120F	1.60	3.20	11.4	8.0	120	2.85	0.09	0.22

IH=Hold current-maximum current at which the device will not trip at 23℃ still air.
IT=Trip current-minimum current at which the device will always trip at 23℃ still air.
V MAX=Maximum voltage device can withstand without damage at its rated current.
I MAX= Maximum fault current device can withstand without damage at rated voltage (V MAX).
Pd=Typical power dissipated from device when in tripped state in 23℃ still air environment.
RMIN=Minimum device resistance at 23℃.
R1MAX=Maximum device resistance at 23℃, 1 hour after tripping .
Physical specifications:
Lead material: Tin plated copper,20AWG.
Soldering characteristics:MIL-STD-202, Method 208E.
Insulating coating:Flame retardant epoxy, meets UL-94V-0 requirement.

4. Production Dimensions (millimeter)

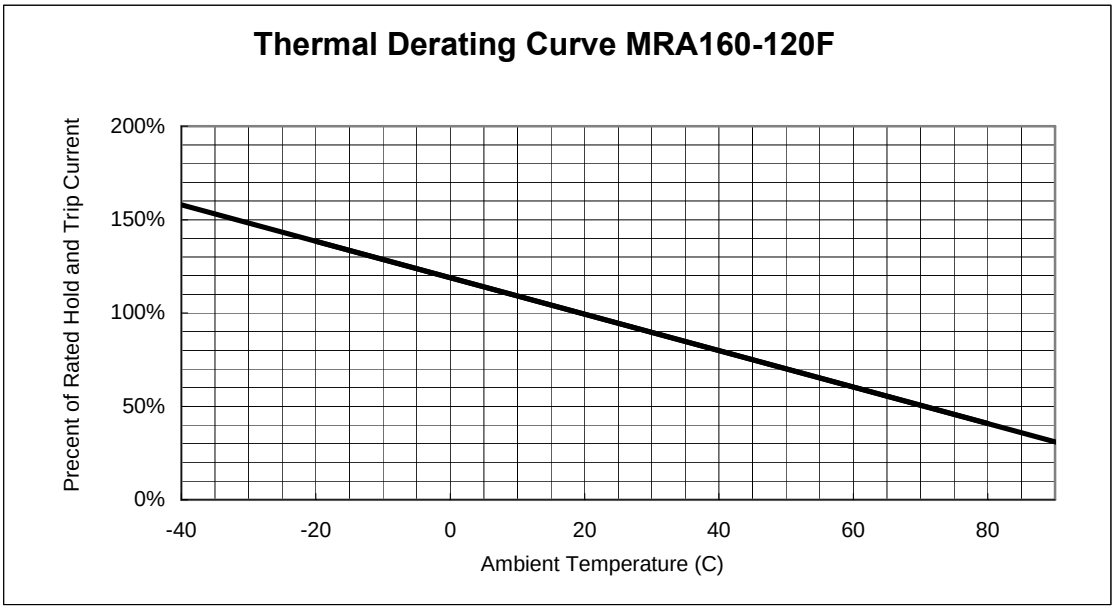


Lead Size : 20AWG
Φ 0.81 mm Diameter

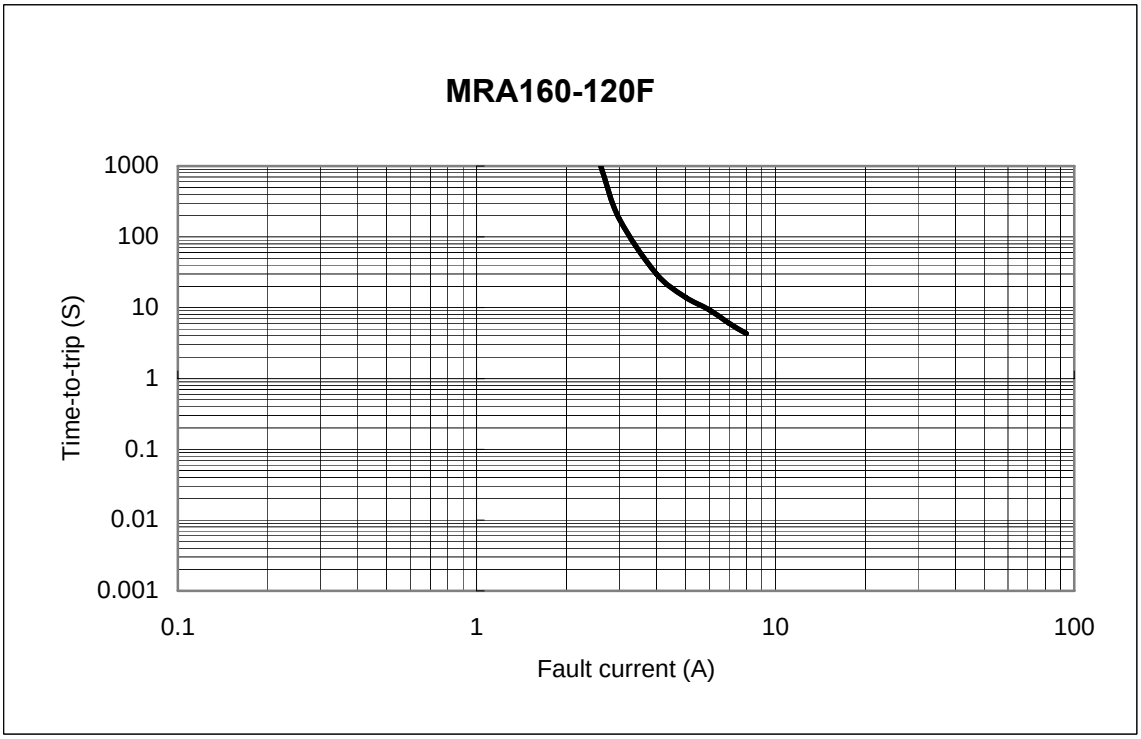
Part Number	A	B	C	D	E	F
	Maximum	Maximum	Typical	Minimum	Maximum	Typical
MRA160-120F	17.5	22.5	5.1	7.6	5.0	3.0

NOTE : Specification subject to change without notice.

5. Thermal De rating Curve



6. Typical Time-To-Trip at 23℃



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7. Material Specification

Lead material：Tin plated copper, 20 AWG.

Soldering characteristics:MIL-STD-202, Method 208E.

Insulating coating:Flame retardant epoxy, meets UL-94V-0 requirement

8. Part Numbering and Marking System

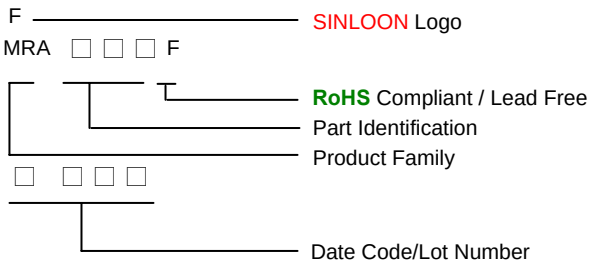
Part Numbering System

M R A □ □ □ — □ □ □ F

- **RoHS** Compliant / Lead Free
- Voltage rating
- Current rating

Part Marking System

Example



Warning: -Operation beyond the specified maximum ratings or improper use may result in damage and possible electrical arcing and/or flame.

-PPTC device are intended for occasional over current protection. Application for repeated over current condition and/or prolonged trip are not anticipated.

- Avoid contact of PPTC device with chemical solvent. Prolonged contact will damage the device performance.

NOTE : Specification subject to change without notice.