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|---------------------|--|
| Application: | Wide variety of electronic equipment |
| Product Features: | Low hold current, Solid state Radial-leaded product ideal for up to 120VDC/ 120VAC |
| Operation Current: | 100mA~3.75A |
| Maximum Voltage: | 120VDC/120VAC |
| Temperature Range: | -40°C to 85°C |
| Agency Recognition: | UL, C-UL & TÜV pending |

Electrical Characteristics (23°C)

| Part Number | Hold Current | Trip Current | Max. Time to Trip | Maximum Current | Rated Voltage | Typical Power | Resistance Tolerance | |
|-------------|--------------|--------------|-------------------|-----------------|---------------|---------------|----------------------|-------|
| | IH, A | IT, A | at 5xIH | IMAX, A | VMAX, Vdc | Pd, W | RMIN | R1MAX |
| | ohms | ohms | | | | | | |
| RA010-120 | 0.10 | 0.20 | 4.0 | 2 | 120 | 0.57 | 2.50 | 7.50 |
| RA017-120 | 0.17 | 0.34 | 3.0 | 2 | 120 | 0.59 | 2.00 | 7.00 |
| RA020-120 | 0.20 | 0.40 | 2.2 | 2 | 120 | 0.62 | 1.83 | 4.40 |
| RA025-120 | 0.25 | 0.50 | 2.5 | 3 | 120 | 0.68 | 1.25 | 3.00 |
| RA030-120 | 0.30 | 0.60 | 3.0 | 3 | 120 | 0.74 | 0.88 | 2.10 |
| RA040-120 | 0.40 | 0.80 | 3.8 | 3 | 120 | 0.84 | 0.55 | 1.29 |
| RA050-120 | 0.50 | 1.00 | 4.0 | 3 | 120 | 1.16 | 0.50 | 1.17 |
| RA065-120 | 0.65 | 1.30 | 5.3 | 3 | 120 | 1.32 | 0.31 | 0.72 |
| RA075-120 | 0.75 | 1.50 | 6.3 | 5 | 120 | 1.38 | 0.25 | 0.60 |
| RA090-120 | 0.90 | 1.80 | 7.2 | 5 | 120 | 1.49 | 0.20 | 0.47 |
| RA110-120 | 1.10 | 2.20 | 8.2 | 5 | 120 | 2.25 | 0.15 | 0.38 |
| RA135-120 | 1.35 | 2.70 | 9.6 | 8 | 120 | 2.55 | 0.12 | 0.30 |
| RA160-120 | 1.60 | 3.20 | 11.4 | 8 | 120 | 2.85 | 0.09 | 0.22 |
| RA185-120 | 1.85 | 3.70 | 12.6 | 8 | 120 | 3.15 | 0.08 | 0.19 |
| RA250-120 | 2.50 | 5.00 | 15.6 | 12 | 120 | 3.75 | 0.05 | 0.13 |
| RA300-120 | 3.00 | 6.00 | 19.8 | 15 | 120 | 4.20 | 0.04 | 0.10 |
| RA375-120 | 3.75 | 7.50 | 24.0 | 15 | 120 | 4.80 | 0.03 | 0.08 |

IH=Hold current-maximum current at which the device will not trip at 23°C still air.

IT=Trip current-minimum current at which the device will always trip at 23°C 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 the tripped state in 23°C still air environment.

RMIN=Minimum device resistance at 23°C.

R1MAX=Maximum device resistance at 23°C, 1 hour after tripping .

Physical specifications:

Lead material: Tin plated copper, 24 AW

Soldering characteristics: RA010~RA090 Tin plated copper, 22 AWG.

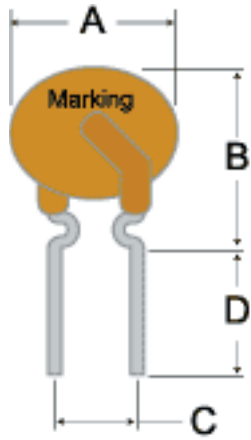
RA110~RA375 Tin plated copper, 20 AWG.

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

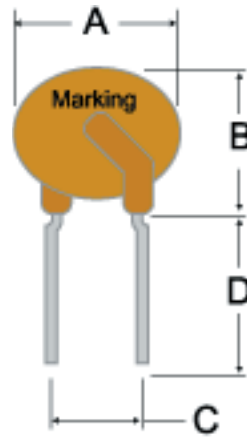
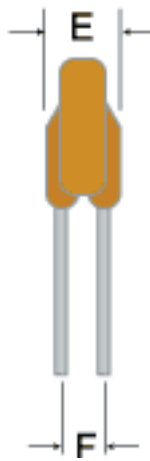
Insulating coating:Flame retardant epoxy, meet UL-94V-0 requirement

Specifications are subject to change without notice.

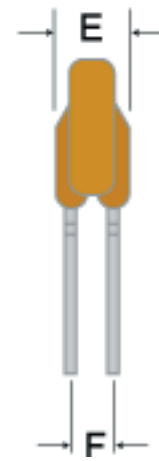
RA Product Dimensions (Millimeters)



RA010-120 ~ RA090-120
Lead Size: 22AWG,
Ø 0.65 mm Diameter

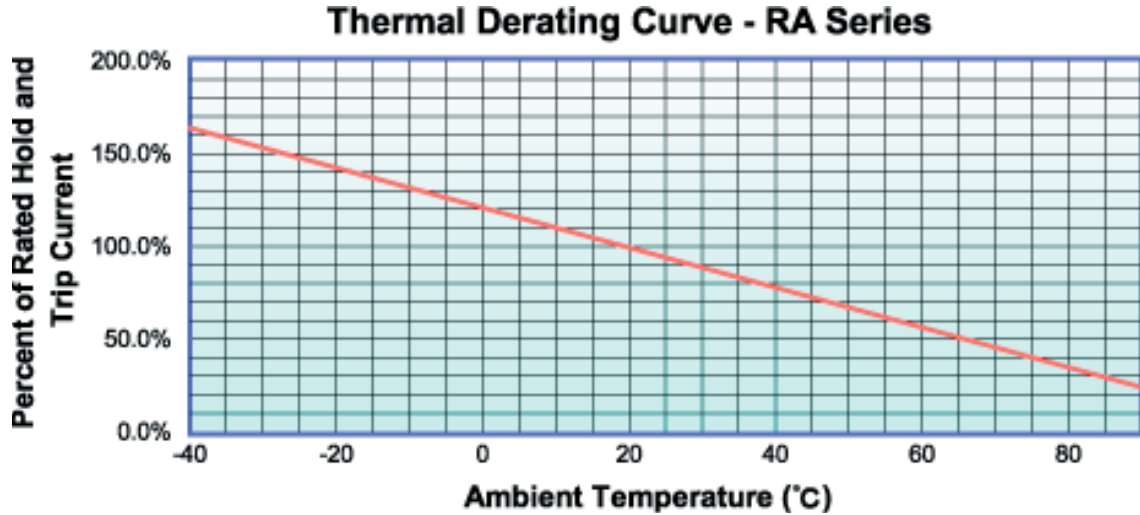


RA110-120 ~ RA375-120
Lead Size: 20AWG,
Ø 0.81 mm Diameter



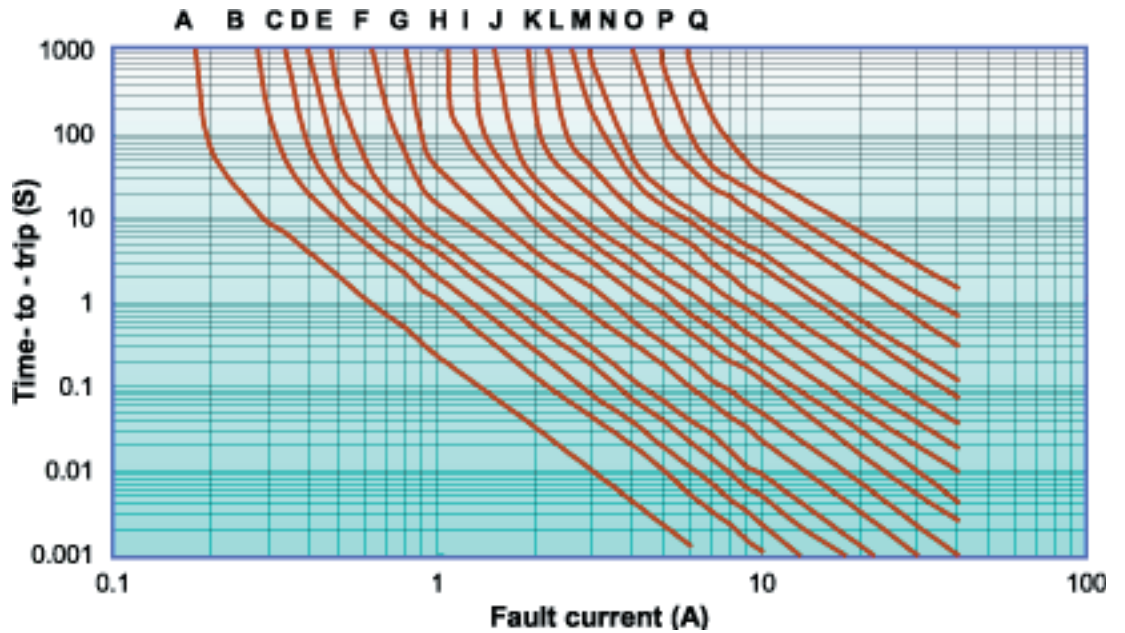
| Part Number | A | B | C | D | E | F |
|-------------|---------|---------|---------|---------|---------|---------|
| | Maximum | Maximum | Typical | Minimum | Maximum | Typical |
| RA010-120 | 7.9 | 12.7 | 5.1 | 7.6 | 5 | 3 |
| RA017-120 | 7.9 | 12.7 | 5.1 | 7.6 | 5 | 3 |
| RA020-120 | 7.9 | 12.2 | 5.1 | 7.6 | 5 | 3 |
| RA025-120 | 7.9 | 12.7 | 5.1 | 7.6 | 5 | 3 |
| RA030-120 | 7.9 | 13.0 | 5.1 | 7.6 | 5 | 3 |
| RA040-120 | 8.2 | 14.2 | 5.1 | 7.6 | 5 | 3 |
| RA050-120 | 9.2 | 14.9 | 5.1 | 7.6 | 5 | 3 |
| RA065-120 | 9.7 | 14.9 | 5.1 | 7.6 | 5 | 3 |
| RA075-120 | 10.6 | 15.5 | 5.1 | 7.6 | 5 | 3 |
| RA090-120 | 11.9 | 15.9 | 5.1 | 7.6 | 5 | 3 |
| RA110-120 | 13.3 | 18.3 | 5.1 | 7.6 | 5 | 3 |
| RA135-120 | 15.5 | 20.6 | 5.1 | 7.6 | 5 | 3 |
| RA160-120 | 17.5 | 22.5 | 5.1 | 7.6 | 5 | 3 |
| RA185-120 | 19.9 | 24.9 | 5.1 | 7.6 | 5 | 3 |
| RA250-120 | 22.5 | 27.5 | 10.2 | 7.6 | 5 | 3 |
| RA300-120 | 25.5 | 30.0 | 10.2 | 7.6 | 5 | 3 |
| RA375-120 | 29.5 | 34.0 | 10.2 | 7.6 | 5 | 3 |

Thermal Derating Curve

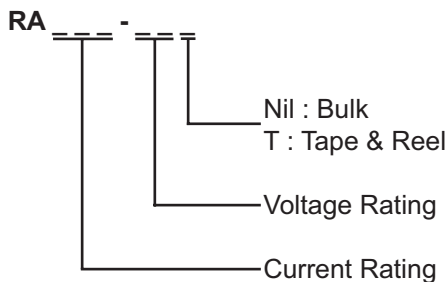


Typical Time-To-Trip at 23°C

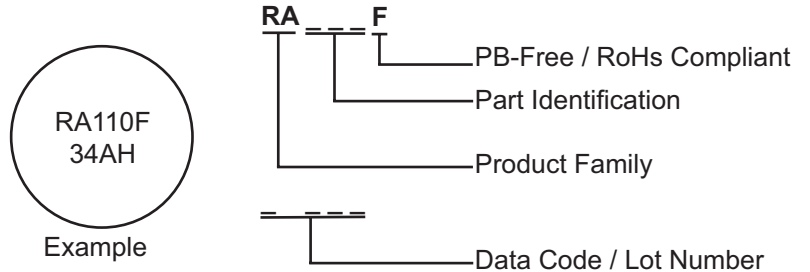
- A = RA010-120
- B = RA017-120
- C = RA020-120
- D = RA025-120
- E = RA030-120
- F = RA040-120
- G = RA050-120
- H = RA065-120
- I = RA075-120
- J = RA090-120
- K = RA110-120
- L = RA135-120
- M = RA160-120
- N = RA185-120
- O = RA250-120
- P = RA300-120
- Q = RA375-120



Part Numbering System



Part Marking System





RA Series

Radial Leaded PTC

Standard Package

| P/N | Pcs /Bag | Reel/Tape |
|-----------|----------|-----------|
| RA010-120 | 300 | 1.5K |
| RA017-120 | 300 | 1.5K |
| RA020-120 | 300 | 1.5K |
| RA025-120 | 300 | 1.5K |
| RA030-120 | 300 | 1.5K |
| RA040-120 | 300 | 1.5K |
| RA050-120 | 300 | 1.5K |
| RA065-120 | 300 | 1.5K |
| RA075-120 | 300 | 1.5K |
| RA090-120 | 300 | 1.5K |
| RA110-120 | 300 | 600 |
| RA135-120 | 200 | 600 |
| RA160-120 | 200 | ----- |
| RA185-120 | 200 | ----- |
| RA250-120 | 100 | ----- |
| RA300-120 | 100 | ----- |
| RA375-120 | 100 | ----- |

- 1- Operation beyond the specified maximum ratings or improper use may result in damage and possible electrical arcing and/or flame.
- 2 -PPTC device are intended for occasional overcurrent protection. Application for repeated overcurrent condition and/or prolonged trip are not anticipated.
- 3- Avoid contact of PPTC device with chemical solvent. Prolonged contact will damage the device performance.