

Radial Leaded PTC Resettable Fuse



Specifications:

| | |
|--------------------------|--|
| Lead Material | : Tin plated copper |
| Soldering Characteristic | : MIL-DTD-202, Method 208E |
| Insulating Coating | : Flame retardant epoxy |
| Operating Current | : 100mA to 3.75A |
| Max. Voltage | : Up to 90V |
| Temperature Range | : -40°C to 85°C |
| Applications | : Telecom and wide variety of electronic equipment |
| Product features | : Low hold current, Solid state, Radial leaded product ideal for up to 90V |
| Agency Recognition | : UL File E345437 |

Electrical Characteristics (23°C)

| Part Number | Hold Current I _H , A | Trip Current I _T , A | Max. Time to Trip at 5 × I _H | Max. Current I _{MAX} , A | Rated Voltage V _{MAX} , V DC | Typical Power Pd, W | Resistance | |
|-------------|------------------------------------|------------------------------------|--|--------------------------------------|--|------------------------|-----------------------|------------------------|
| | | | | | | | R _{MIN} Ω | R _{1MAX} Ω |
| MC36184 | 0.1 | 0.2 | 4 | 40 | 72/90 | 0.38 | 2.5 | 7.5 |
| MC36185 | 0.15 | 0.35 | 10 | | | 0.7 | 2.4 | 7 |
| MC36186 | 0.17 | 0.34 | 3 | | | 0.48 | 2 | 8 |
| MC33171 | 0.2 | 0.4 | 2.2 | | | 0.41 | 1.83 | 4.4 |
| MC33172 | 0.25 | 0.5 | 2.5 | | | 0.45 | 1.25 | 3 |
| MC33173 | 0.3 | 0.6 | 3 | | | 0.49 | 0.88 | 2.1 |
| MC36190 | 0.35 | 0.75 | 10 | | | 1.3 | 0.7 | 2.5 |
| MC33174 | 0.4 | 0.8 | 3.8 | | | 0.56 | 0.55 | 1.29 |
| MC33175 | 0.5 | 1 | 4 | | | 0.77 | 0.5 | 1.17 |
| MC36193 | 0.55 | 1.2 | 10 | | | 1.5 | 0.4 | 1.5 |
| MC33176 | 0.65 | 1.3 | 5.3 | | | 0.88 | 0.31 | 0.72 |
| MC33177 | 0.75 | 1.5 | 6.3 | | | 0.92 | 0.25 | 0.6 |
| MC33178 | 0.9 | 1.8 | 7.2 | | | 0.99 | 0.2 | 0.47 |
| MC33179 | 1.1 | 2.2 | 8.2 | | | 1.5 | 0.15 | 0.38 |
| MC33180 | 1.35 | 2.7 | 9.6 | | | 1.7 | 0.12 | 0.3 |
| MC33181 | 1.6 | 3.2 | 11.4 | | | 1.9 | 0.09 | 0.22 |
| MC33182 | 1.85 | 3.7 | 12.6 | | | 2.1 | 0.08 | 0.19 |
| MC33183 | 2.5 | 5 | 15.6 | | | 2.5 | 0.05 | 0.13 |
| MC33184 | 3 | 6 | 19.8 | | | 2.8 | 0.04 | 0.1 |
| MC33185 | 3.75 | 7.5 | 24 | | | 3.2 | 0.03 | 0.08 |

I_H = Hold current-maximum current at which the device will not trip at 23°C still air
 I_T = 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 tripped state in 23°C still air environment
 R_{MIN} = Minimum device resistance at 23°C
 R_{1MAX} = Maximum device resistance at 23°C, 1 hour after tripping

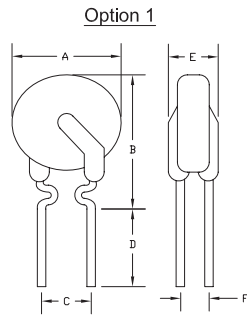
www.element14.com
www.farnell.com
www.newark.com



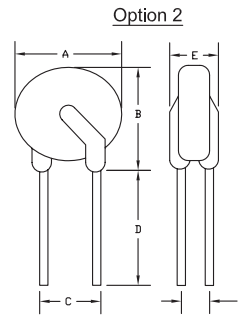
Radial Leaded PTC Resettable Fuse



Dimensions



Lead Size : 24AWG
ø0.51mm Diameter

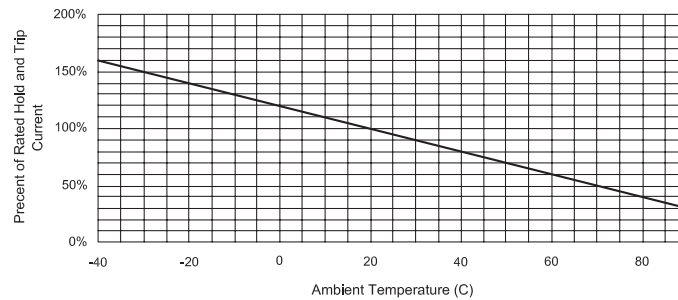


Lead Size : 20AWG
ø0.81mm Diameter

| Part Number | A Max. | B Max. | C Typical | D Min. | E Max. | F Typical | Drawing Option |
|-------------|-----------|-----------|--------------|-----------|-----------|--------------|----------------|
| MC36184 | 7.4 | 12.7 | 5.1 | 7.6 | 3.1 | 1.1 | Option 1 |
| MC36185 | | | | | | | |
| MC36186 | | | | | | | |
| MC33171 | | | | | | | |
| MC33172 | | | | | | | |
| MC33173 | | | | | | | |
| MC36190 | | | | | | | |
| MC33174 | 7.6 | 13.5 | 10.2 | 7.6 | 3.1 | 1.4 | Option 2 |
| MC33175 | 7.9 | 13.7 | | | | | |
| MC36193 | 9.7 | 14 | | | | | |
| MC33176 | 9.7 | 14.5 | | | | | |
| MC33177 | 10.4 | 15.2 | | | | | |
| MC33178 | 11.7 | 15.8 | | | | | |
| MC33179 | 13 | 18 | | | | | |
| MC33180 | 14.5 | 19.6 | | | | | |
| MC33181 | 16.3 | 21.3 | | | | | |
| MC33182 | 17.8 | 22.9 | | | | | |
| MC33183 | 21.3 | 26.4 | 10.2 | 7.6 | 3.1 | 1.4 | Option 2 |
| MC33184 | 24.9 | 30 | | | | | |
| MC33185 | 28.5 | 33.5 | | | | | |

Dimensions : Millimetres

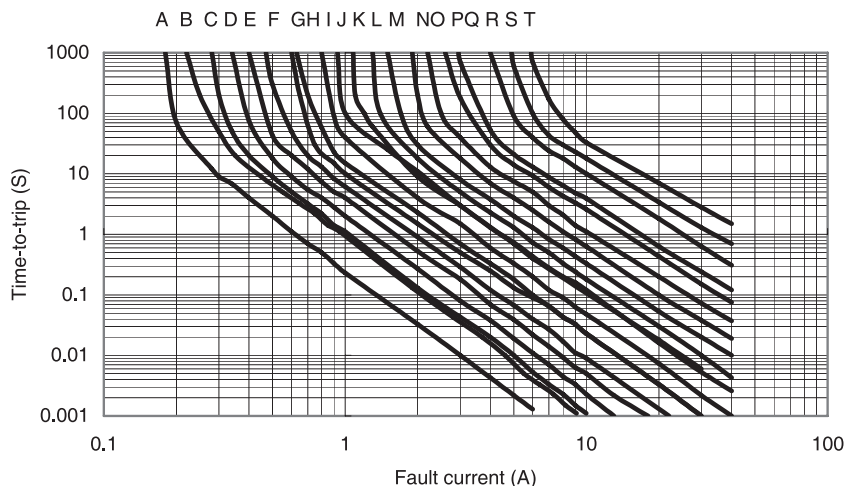
Thermal Derating Curve



Radial Leaded PTC Resettable Fuse



Typical Time-To-Trip at 23°C



- A = MC36184 K = MC33176
- B = MC36185 L = MC33177
- C = MC36186 M = MC33178
- D = MC33171 N = MC33179
- E = MC33172 O = MC33180
- F = MC33173 P = MC33181
- G = MC36190 Q = MC33182
- H = MC33174 R = MC33183
- I = MC33175 S = MC33184
- J = MC36193 T = MC33185

Part Number Table

| Description | Part Number |
|---|-------------|
| 100mA Radial Leaded PTC Resettable Fuse | MC36184 |
| 150mA Radial Leaded PTC Resettable Fuse | MC36185 |
| 170mA Radial Leaded PTC Resettable Fuse | MC36186 |
| 200mA Radial Leaded PTC Resettable Fuse | MC33171 |
| 250mA Radial Leaded PTC Resettable Fuse | MC33172 |
| 300mA Radial Leaded PTC Resettable Fuse | MC33173 |
| 350mA Radial Leaded PTC Resettable Fuse | MC36190 |
| 400mA Radial Leaded PTC Resettable Fuse | MC33174 |
| 500mA Radial Leaded PTC Resettable Fuse | MC33175 |
| 550mA Radial Leaded PTC Resettable Fuse | MC36193 |
| 650mA Radial Leaded PTC Resettable Fuse | MC33176 |
| 750mA Radial Leaded PTC Resettable Fuse | MC33177 |
| 900mA Radial Leaded PTC Resettable Fuse | MC33178 |
| 1.1A Radial Leaded PTC Resettable Fuse | MC33179 |
| 1.35A Radial Leaded PTC Resettable Fuse | MC33180 |
| 1.6A Radial Leaded PTC Resettable Fuse | MC33181 |
| 1.85A Radial Leaded PTC Resettable Fuse | MC33182 |
| 2.5A Radial Leaded PTC Resettable Fuse | MC33183 |
| 3A Radial Leaded PTC Resettable Fuse | MC33184 |
| 3.75A Radial Leaded PTC Resettable Fuse | MC33185 |

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