

Radial Leaded PTC Resettable Fuse



Specifications:

Applications : Wide variety of electronic equipment
 Product Features : Very Low resistance, Very High hold current, Solid state,
 Radial leaded product ideal for up to 16V
 Operation Current : 50mA to 3A
 Maximum Voltage : 60V
 Temperature Range : -40°C to 85°C



Electrical Characteristics (23°C):

| Hold Current | Trip Current | Maximum Time to trip | Maximum Current | Rated Voltage | Typical Power | Resistance | | Part Number |
|--------------|--------------|----------------------|-----------------|-----------------|---------------|------------|------------|-------------|
| | | | | | | R minimum | R1 maximum | |
| I_H , A | I_T , A | at 5x I_H | I Maximum, A | V maximum, V dc | P_d , W | ohms | ohms | |
| 0.05 | 0.10 | 5.0 | 40 | 60 | 0.26 | 7.30 | 20.0 | MC36183 |
| 0.20 | 0.40 | 2.2 | | | 0.41 | 1.83 | 4.40 | MC36187 |
| 0.25 | 0.50 | 2.5 | | | 0.45 | 1.25 | 3.00 | MC36188 |
| 0.30 | 0.60 | 3.0 | | | 0.49 | 0.88 | 2.10 | MC36189 |
| 0.40 | 0.80 | 3.8 | | | 0.56 | 0.55 | 1.29 | MC36191 |
| 0.50 | 1.00 | 4.0 | | | 0.77 | 0.50 | 1.17 | MC36192 |
| 0.65 | 1.30 | 5.3 | | | 0.88 | 0.31 | 0.72 | MC36194 |
| 0.75 | 1.50 | 6.3 | | | 0.92 | 0.25 | 0.60 | MC36195 |
| 0.90 | 1.80 | 7.2 | | | 0.99 | 0.20 | 0.47 | MC36196 |
| 1.10 | 2.20 | 8.2 | | | 1.50 | 0.15 | 0.38 | MC36197 |
| 1.35 | 2.70 | 9.6 | | | 1.70 | 0.12 | 0.30 | MC36198 |
| 1.60 | 3.20 | 11.4 | | | 1.90 | 0.09 | 0.22 | MC36199 |
| 1.85 | 3.70 | 12.6 | | | 2.10 | 0.08 | 0.19 | MC36200 |
| 2.50 | 5.00 | 15.6 | | | 2.50 | 0.05 | 0.13 | MC36201 |
| 3.00 | 6.00 | 19.8 | | | 2.80 | 0.04 | 0.10 | MC36202 |

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 maximum).
 P_d = Typical power dissipated from device when in the tripped state in 23°C still air environment.
 R_{MIN} = Minimum device resistance at 23°C.
 $R1_{MAX}$ = Maximum device resistance at 23°C 1 hour after tripping .

Physical specifications:

Lead material : Tin plated copper, 24 AWG.
 Tin plated copper, 20 AWG.
 Soldering characteristics : MIL-STD-202, Method 208E.
 Insulating coating : Flame retardant epoxy.

<http://www.farnell.com>
<http://www.newark.com>
<http://www.cpc.co.uk>

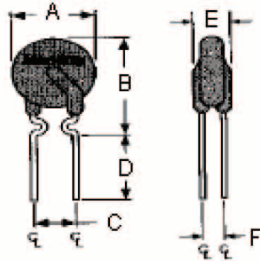


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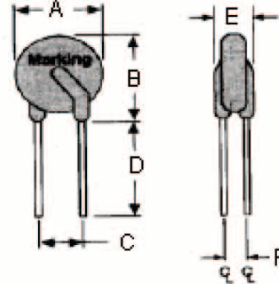
Production Dimensions (millimetre)

Fig 1



Lead Size : 24 AWG
Ø0.51 mm Diameter

Fig 2



Lead Size : 20 AWG
Ø0.81 mm Diameter

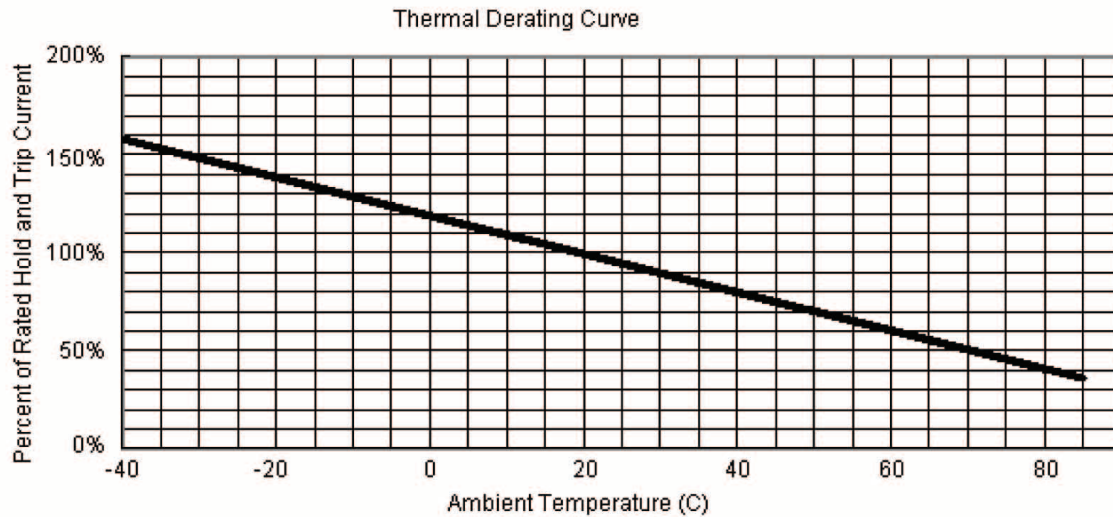
Specification Table

| A | B | C | D | E | F | Part Number | Figure |
|---------|---------|---------|---------|---------|---------|-------------|--------|
| Maximum | Maximum | Typical | Minimum | Maximum | Typical | | |
| 7.4 | 12.7 | 5.1 | 7.6 | 3.1 | 1.1 | MC36183 | 1 |
| | 13.0 | | | | | MC36187 | |
| 13.5 | MC36188 | | | | | | |
| 13.7 | MC36189 | | | | | | |
| 14.5 | MC36191 | | | | | | |
| 15.2 | MC36192 | | | | | | |
| 15.8 | MC36194 | | | | | | |
| 18.0 | MC36195 | | | | | | |
| 19.6 | MC36196 | | | | | | |
| 21.3 | 10.2 | | | | | 10.2 | |
| 22.9 | MC36198 | | | | | | |
| 26.4 | MC36199 | | | | | | |
| 30.0 | MC36200 | | | | | | |
| | | | | | | MC36201 | |
| | | | | | | MC36202 | |

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Thermal Derating Curve



Typical Time-To-Trip at 23°C

- A=MC36183
- D=MC36187
- E=MC36188
- F=MC36189
- G=MC36191
- H=MC36192
- I=MC36194
- J=MC36195
- K=MC36196
- L=MC36197
- M=MC36198
- N=MC36199
- O=MC36200
- P=MC36201
- Q=MC36202

