# Radial Leaded PTC
## Resettable Fuse

RoHS Compliant

### Specifications:

Applications : Low voltage USB equipment and computers and peripherals
Product features : Low resistance, fast trip time, low trip-to-hold ratio
Maximum voltage : 16V / 30V
Temperature range : -40°C to 85°C

### Electrical Characteristics (23°C)

| Hold Current | Trip Current | Max. Time to trip | | Max. Current | Rated Voltage | Typical Power | Resistance | | Part Number |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | $R_{Min}$ | $R1_{Max}$ | |
| $I_H$, A | $I_T$, A | at 8A | at 5 × $I_H$ | $I_{MAX}$, A | $V_{MAX}$, V DC | $P_D$, W | Ω | Ω | |
| 0.75 | 1.3 | 0.4 | - | 40 | 16 | 0.3 | 0.08 | 0.23 | MC36245 |
| 0.9 | 1.8 | 1.2 | 5.9 | 40 | 16/30 | 0.6 | 0.07 | 0.18 | MC36246 |
| 1.1 | 2.2 | 2.3 | 6.6 | 40 | 16/30 | 0.7 | 0.05 | 0.14 | MC36247 |
| 1.2 | 2 | 0.5 | - | 40 | 16 | 0.6 | 0.04 | 0.14 | MC36248 |
| 1.35 | 2.7 | 4.5 | 7.3 | 40 | 16/30 | 0.8 | 0.04 | 0.12 | MC36249 |
| 1.55 | 2.7 | 0.6 | - | 40 | 16 | 0.7 | 0.03 | 0.12 | MC36250 |
| 1.6 | 3.2 | 9 | 8 | 40 | 16/30 | 0.9 | 0.03 | 0.11 | MC36251 |
| 1.85 | 3.7 | 10 | 8.7 | 40 | 16/30 | 1 | 0.03 | 0.09 | MC36252 |
| 2.5 | 5 | 40 | 10.3 | 40 | 16/30 | 1.2 | 0.02 | 0.07 | MC36253 |

$I_H$ = 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.

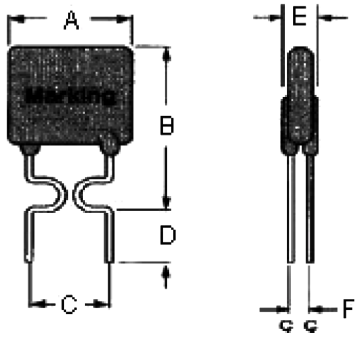
### Physical specifications:

Lead material : Tin plated copper.
Soldering characteristics : Solder ability per ANSI/J-STD 002
Solder heat withstand per IEC 68-2-20.
Insulating coating : Flame retardant epoxy polymer.

# Radial Leaded PTC
## Resettable Fuse

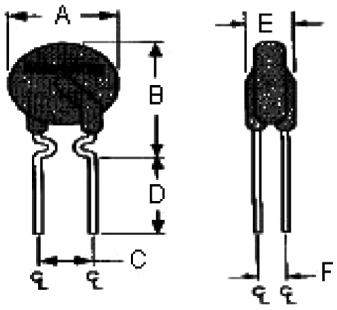
### Production Dimensions (millimeter)

Figure 1




Lead Size : 24 AWG
Ø0.51mm Diameter

Figure 2



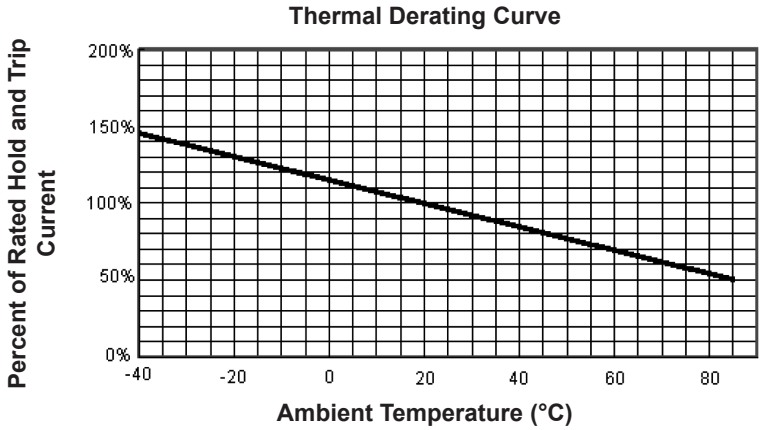

Lead Size : 24 AWG
Ø0.51mm Diameter

### Dimensions Table

| A | B | C | D | E | F | Figure | Part Number |
|---|---|---|---|---|---|---|---|
| Maximum | Maximum | Typical | Minimum | Maximum | Typical | | |
| 6.9 | 11.4 | 5.1 | 7.6 | 3 | 0.8 | 2 | MC36245 |
| 7.4 | 12.2 | 5.1 | 7.6 | 3 | 0.8 | 1 | MC36246 |
| 7.4 | 14.2 | 5.1 | 7.6 | 3 | 0.8 | 1 | MC36247 |
| 6.9 | 11.7 | 5.1 | 7.6 | 3 | 0.8 | 2 | MC36248 |
| 8.9 | 13.5 | 5.1 | 7.6 | 3 | 0.8 | 1 | MC36249 |
| 6.9 | 11.7 | 5.1 | 7.6 | 3 | 0.8 | 2 | MC36250 |
| 8.9 | 15.2 | 5.1 | 7.6 | 3 | 0.8 | 1 | MC36251 |
| 10.2 | 15.7 | 5.1 | 7.6 | 3 | 0.8 | 1 | MC36252 |
| 11.4 | 18.3 | 5.1 | 7.6 | 3 | 0.8 | 1 | MC36253 |

Dimensions : Millimetres

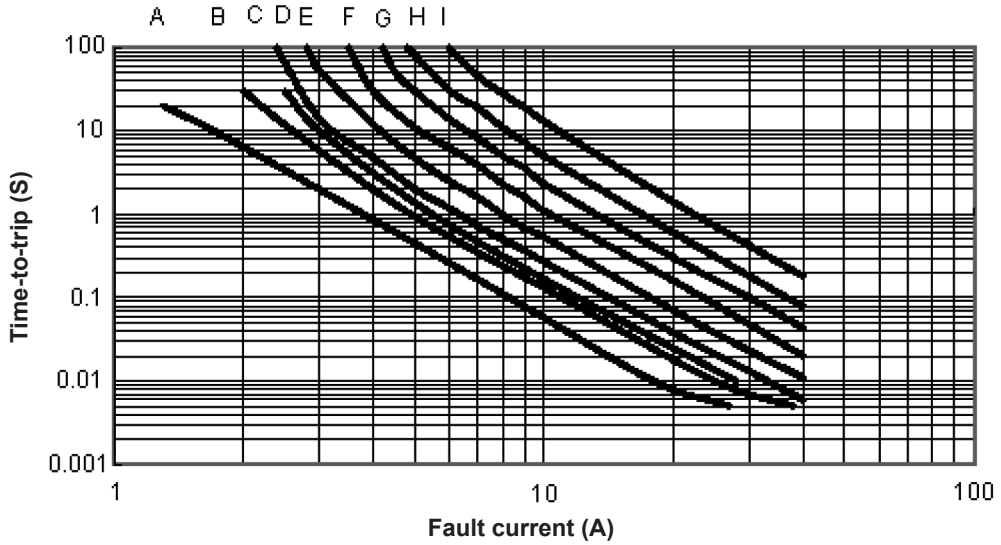
### Thermal Derating Curve



# Radial Leaded PTC
## Resettable Fuse

### Typical Time-To-Trip at 23°C

**A = MC36245**
**B = MC36248**
**C = MC36250**
**D = MC36246**
**E = MC36247**
**F = MC36249**
**G = MC36251**
**H = MC36252**
**I = MC36253**




### Material Specification

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

### Part Number Table

| Description | Part Number |
|---|---|
| Radial Leaded PTC Resettable Fuse | MC36245 |
| | MC36246 |
| | MC36247 |
| | MC36248 |
| | MC36249 |
| | MC36250 |
| | MC36251 |
| | MC36252 |
| | MC36253 |