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.

UL: E-345437



Electrical Characteristics (23°C)

| Hold Current | Trip Current | Maximum Time to trip | | Maximum Current | Rated Voltage | Typical Power | Resistance | | |
|-------------------|-------------------|----------------------|-----------------------|---------------------|------------------------|-------------------|------------------|-------------------|-------------|
| | | | | | | | R _{Min} | R1 _{Max} | Part Number |
| I _{H,} A | I _{T,} A | at 8A | at 5 x I _H | I _{Max,} A | V _{Max,} V dc | P _{d,} W | Ω | Ω | |
| 0.75 | 1.30 | 0.4 | | 40 | 16 | 0.3 | 0.08 | 0.23 | MC36245 |
| 0.90 | 1.80 | 1.2 | 5.9 | 40 | 16/30 | 0.6 | 0.07 | 0.18 | MC36246 |
| 1.10 | 2.20 | 2.3 | 6.6 | 40 | 16/30 | 0.7 | 0.05 | 0.14 | MC36247 |
| 1.20 | 2.00 | 0.5 | | 40 | 16 | 0.6 | 0.04 | 0.14 | MC36248 |
| 1.35 | 2.70 | 4.5 | 7.3 | 40 | 16/30 | 0.8 | 0.04 | 0.12 | MC36249 |
| 1.55 | 2.70 | 0.6 | | 40 | 16 | 0.7 | 0.03 | 0.12 | MC36250 |
| 1.60 | 3.20 | 9.0 | 8.0 | 40 | 16/30 | 0.9 | 0.03 | 0.11 | MC36251 |
| 1.85 | 3.70 | 10.0 | 8.7 | 40 | 16/30 | 1.0 | 0.03 | 0.09 | MC36252 |
| 2.50 | 5.00 | 40.0 | 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.

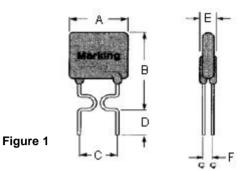
http://www.farnell.com http://www.newark.com http://www.cpc.co.uk



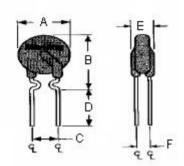
Radial Leaded PTC Resettable Fuse



Production Dimensions (millimeter)



Lead Size : 24 AWG Ø0.51 mm Diameter



Lead Size : 24 AWG Ø0.51 mm Diameter

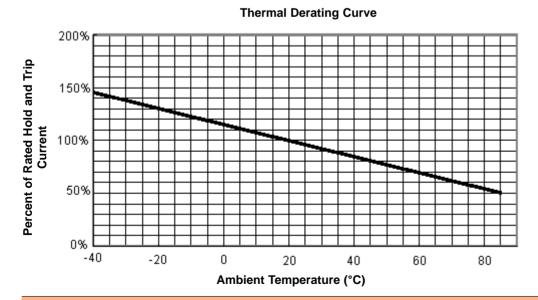
Dimensions Table

| Α | В | С | D | E | F | Fi | Part Number |
|---------|---------|---------|---------|---------|---------|--------|-------------|
| Maximum | Maximum | Typical | Minimum | Maximum | Typical | Figure | |
| 6.9 | 11.4 | 5.1 | 7.6 | 3.0 | 0.8 | 2 | MC36245 |
| 7.4 | 12.2 | 5.1 | 7.6 | 3.0 | 0.8 | 1 | MC36246 |
| 7.4 | 14.2 | 5.1 | 7.6 | 3.0 | 0.8 | 1 | MC36247 |
| 6.9 | 11.7 | 5.1 | 7.6 | 3.0 | 0.8 | 2 | MC36248 |
| 8.9 | 13.5 | 5.1 | 7.6 | 3.0 | 0.8 | 1 | MC36249 |
| 6.9 | 11.7 | 5.1 | 7.6 | 3.0 | 0.8 | 2 | MC36250 |
| 8.9 | 15.2 | 5.1 | 7.6 | 3.0 | 0.8 | 1 | MC36251 |
| 10.2 | 15.7 | 5.1 | 7.6 | 3.0 | 0.8 | 1 | MC36252 |
| 11.4 | 18.3 | 5.1 | 7.6 | 3.0 | 0.8 | 1 | MC36253 |

Figure 2

Thermal Derating Curve

Dimensions : Millimetres



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

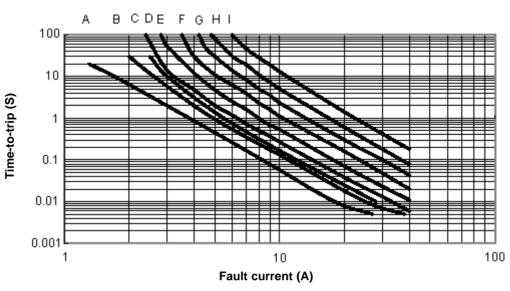


Radial Leaded PTC Resettable Fuse



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 | | |
| Radial Leaded PTC Resettable Fuse | MC36246 | | |
| Radial Leaded PTC Resettable Fuse | MC36247 | | |
| Radial Leaded PTC Resettable Fuse | MC36248 | | |
| Radial Leaded PTC Resettable Fuse | MC36249 | | |
| Radial Leaded PTC Resettable Fuse | MC36250 | | |
| Radial Leaded PTC Resettable Fuse | MC36251 | | |
| Radial Leaded PTC Resettable Fuse | MC36252 | | |
| Radial Leaded PTC Resettable Fuse | MC36253 | | |

Disclaimer This data sheet and its contents (the "Information") belong to the Premier Farnell Group (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. SPC Multicomp is the registered trademark of the Group. © Premier Farnell plc 2011.

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

