

Description

- Axial Leaded
- Fast Acting, Solid Matrix Construction
- High Temperature Thermoplastic Body, UL 94 VO
- Tin-lead plated copper Lead Wires, .025" diameter

ELECTRICAL CHARACTERISTICS	
% of Amp Rating (0-10A)	Opening Time
100%	4 hours minimum
250%	5 seconds maximum

Agency Information

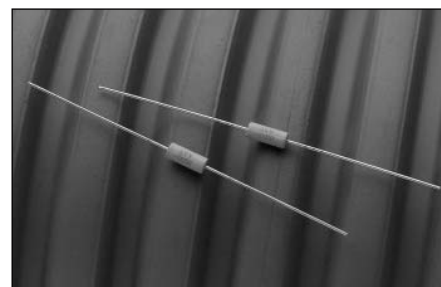
- UL Recognition Guide & File Numbers: JDYX2 & E19180
- CSA Certification File & Class Numbers: 053787 C 00 & 1422 30 (0 - 1/8A); 053787 C 00 & 1422 01 (1/4A - 8A)

Ordering

- Specify product code and packaging code

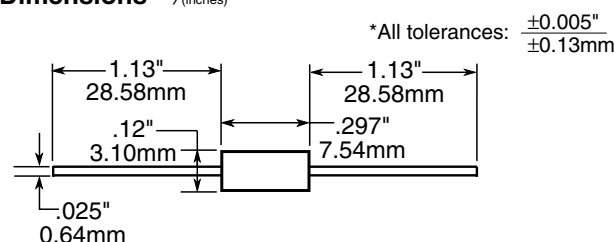
Environmental Data

- Life Test: 2000 hours at 80% rated current, 55°C
- Moisture Resistance: MIL-STD-202, Method 106, 90% relative humidity at 65°C.
- Operating Temperature: -55°C to 125°C with proper fuse derating
- Resistance to Soldering Heat: MIL-STD-202, Method 210, Test Condition C (260°C)
- Salt Spray: MIL-STD-202, Method 101, Test Condition B
- Shock: MIL-STD-202, Method 213, Test Condition I, 100G's for 6 milliseconds
- Solderability: MIL-STD-202, Method 208



- Terminal Strength: MIL-STD-202, Method 211, Test Condition A, will withstand 7 lb. axial pull test.
- Thermal Shock: MIL-STD-202, Method 107, Test Condition B, -65°C to 125°C
- Thermal Cycle: EIA-STD-RS-186-C, Test Condition A, -55°C to 85°C
- Vibration: MIL-STD-202, Method 204, Test Condition C, (55 to 2000 HZ, 10G's peak)
- Wave Soldering: Maximum reservoir temperature 260°C, 10 second maximum exposure, .125" from body.

Dimensions ^{mm/(inches)}



SPECIFICATIONS

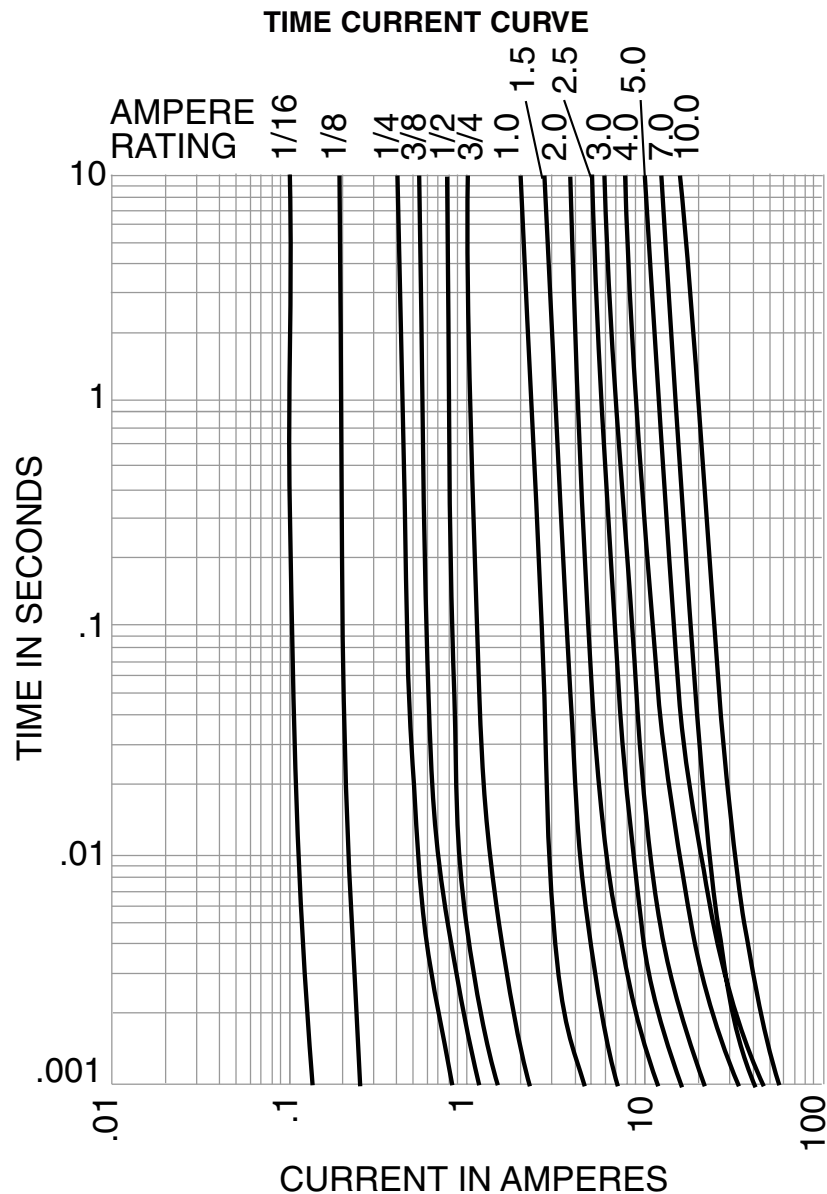
Product Code	Rated Voltage		Interrupting Rating ¹		Pre-arcing ² I ² t (A ² sec)		Typical Total Clearing ² I ² t (A ² sec)		Typical Voltage Drop Volts at 100% Rated
	AC	DC	AC	DC	AC	DC	AC	DC	
MCR-1/16	125V	125V	50A	300A	1.1×10^{-6}	1.0×10^{-7}	1.8×10^{-6}	1.5×10^{-7}	2.33
MCR-1/8	125V	125V	50A	300A	4.3×10^{-6}	7.1×10^{-7}	7.3×10^{-6}	8.7×10^{-7}	1.52
MCR-1/4	125V	125V	50A	300A	8.0×10^{-5}	1.0×10^{-6}	1.2×10^{-4}	1.3×10^{-6}	.76
MCR-3/8	125V	125V	50A	300A	9.7×10^{-5}	6.7×10^{-6}	1.1×10^{-4}	8.3×10^{-6}	.73
MCR-1/2	125V	125V	50A	300A	7.4×10^{-4}	5.4×10^{-5}	6.2×10^{-3}	6.8×10^{-5}	.65
MCR-3/4	125V	125V	50A	300A	1.3×10^{-3}	7.4×10^{-5}	7.5×10^{-2}	9.2×10^{-5}	.55
MCR-1	125V	125V	50A	300A	.01	.01	.02	.01	.24
MCR-1 1/2	125V	125V	50A	300A	.03	.02	.04	.03	.20
MCR-2	125V	125V	50A	300A	.09	.07	.11	.08	.16
MCR-2 1/2	125V	125V	50A	300A	.19	.14	.25	.17	.15
MCR-3	125V	125V	50A	300A	.35	.28	.45	.32	.15
MCR-3 1/2	125V	125V	50A	300A	.56	.37	.83	.43	.14
MCR-4	125V	125V	50A	300A	.96	.67	1.37	.77	.13
MCR-5	125V	125V	50A	300A	1.82	1.34	2.53	1.51	.11
MCR-7	60V	90V	50A	300A	1.48	.49	2.02	.58	.10
MCR-10	60V	90V	50A	300A	3.62	1.16	4.41	1.38	.08

1. Interrupting ratings were measured at 100% (1/16 to 5) and 100% (7, 10) power factors on AC, and a time constant less than 1 ms. on DC.

2. I²t was measured at 50 amps 125 VAC, .95PF, (random closing angle) and 300 amps 125 VDC, TC <1ms. for 1/16 through 5 amps and 50 amps 60 VAC, .95PF, (random closing angle), and 300 amps 90 VDC, TC <1ms. for the 7 and 10 amp fuses.

NOTE: All values shown above are typical.

- Device designed to carry rated current for four hours minimum. An operating current of 80% or less of rated current is recommended, with further derating required at elevated ambient temperatures.



PACKAGING CODE	
Packaging Code	Description
Blank	10 units
BK	500 units
TR	2,500 pieces on tape and reel per EIA-296, 52.4mm spacing

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Eaton:

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