BUSSMANN electronic fuses

COOPER Bussmann

# Subminiature Through Hole
## MCRW Series, Fast Acting, Wire-in-Air

### Description

- Axial Leaded
- Fast Acting, Wire-in-Air Design
- Tin-lead Plated Copper Lead Wires
- High Temperature Epoxy Plastic Body, UL 94 VO
- Interrupt 50 amperes at 125 VAC
- Low resistance values

| ELECTRICAL CHARACTERISTICS | |
|---|---|
| **% of Amp Rating** | **Opening Time** |
| 100% | 4 hours minimum |
| 200% | 5 seconds maximum |

### Agency Information

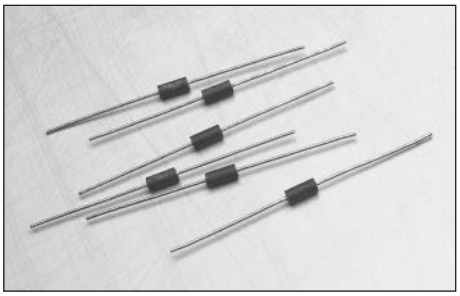
- UL Recognition Guide & File numbers: JDYX2 & E195337.
- CSA Certification Record No: LR 701159 & Class No: 1422 30 and 1422 01.

### Environmental Data

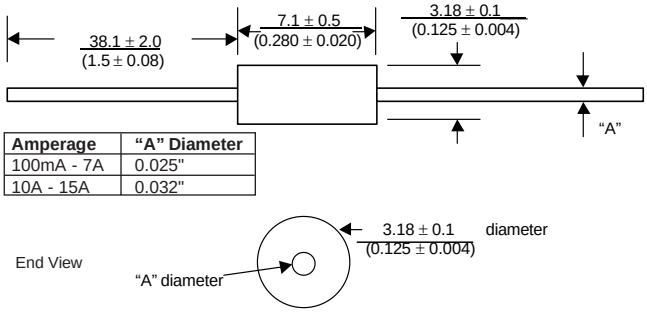
- Shock Resistance: MIL-STD-202, Method 213, Test Condition 1 (Sawtooth)
- Vibration Resistance: MIL-STD-202, Method 201 (10-55 Hz x 3 axis/ no load)
- Moisture Resistance: MIL-STD-202F, Method 106
- Soldering Heat Resistance: 260°C, 10 seconds per IEC 68-2-20
- Salt Spray: MIL-STD-202, Method 101, Test Condition B (48 Hours)

### Ordering

- Specify product code and packaging code

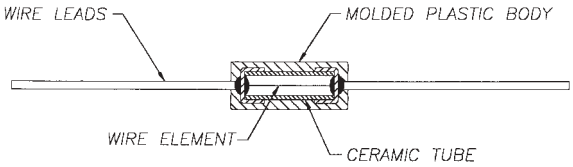


### Dimensions mm/(inches)




| Amperage | "A" Diameter |
|---|---|
| 100mA - 7A | 0.025" |
| 10A - 15A | 0.032" |

### Construction




### Soldering Method

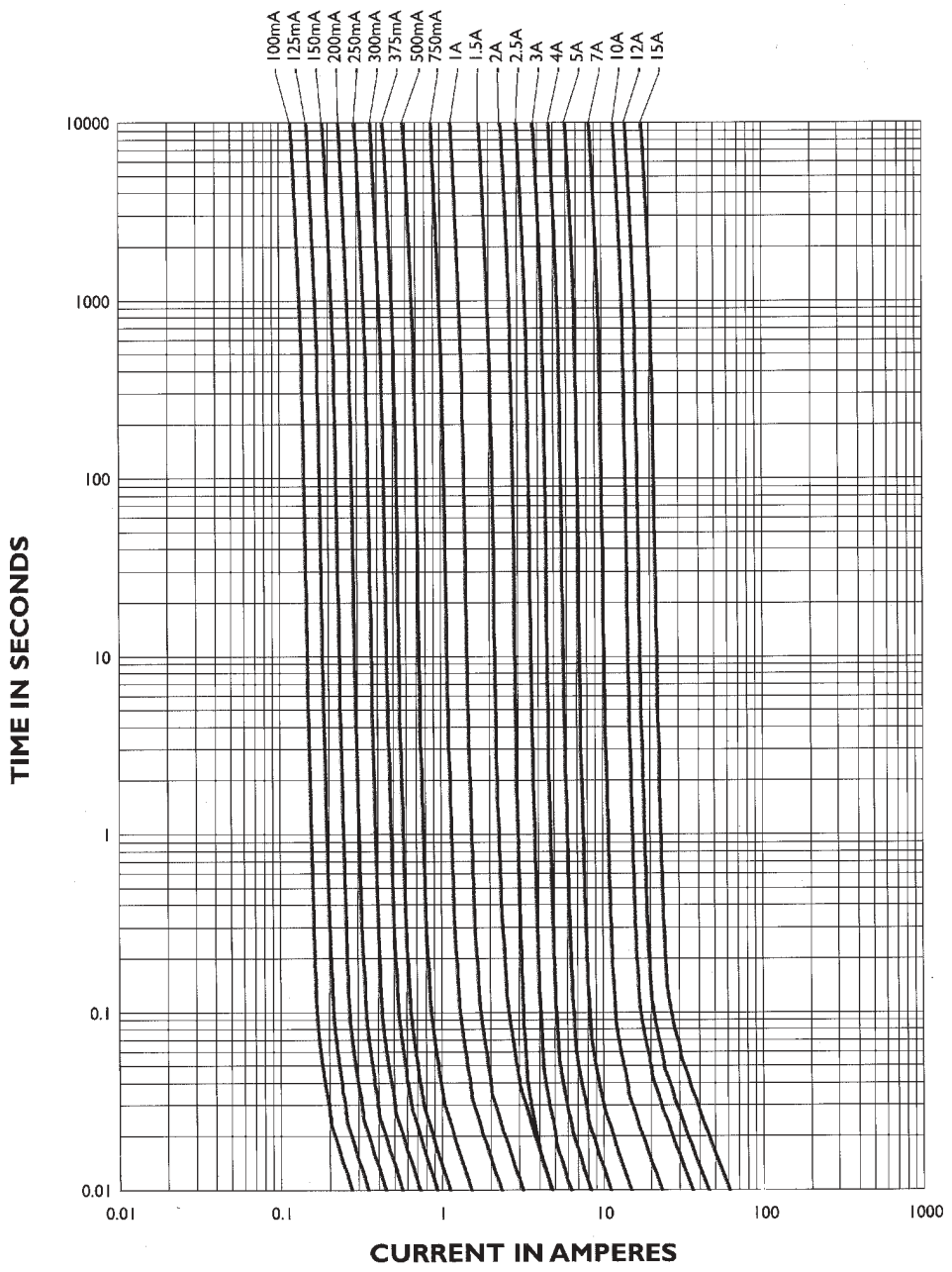
- Heat Resistance: 260°C, 10 sec per IEC 68-2-20

## SPECIFICATIONS

| Product Code | Voltage Rating AC/DC | Interrupting Rating* AC | Interrupting Rating* DC | Resistance (ohms)** Typ. | Typical Melt $I^2t$† | Typical Voltage Drop (V)‡ |
|---|---|---|---|---|---|---|
| **MCRW100mA** | 125 V | 50 A | 300 A | 15.5 | 0.0006 | 0.68 |
| **MCRW125mA** | 125 V | 50 A | 300 A | 2.2 | 0.0009 | 0.61 |
| **MCRW150mA** | 125 V | 50 A | 300 A | 1.6 | 0.0015 | 0.54 |
| **MCRW200mA** | 125 V | 50 A | 300 A | 1.2 | 0.002 | 0.48 |
| **MCRW250mA** | 125 V | 50 A | 300 A | 0.85 | 0.004 | 0.43 |
| **MCRW300mA** | 125 V | 50 A | 300 A | 0.62 | 0.008 | 0.39 |
| **MCRW375mA** | 125 V | 50 A | 300 A | 0.49 | 0.012 | 0.35 |
| **MCRW500mA** | 125 V | 50 A | 300 A | 0.33 | 0.023 | 0.31 |
| **MCRW750mA** | 125 V | 50 A | 300 A | 0.19 | 0.056 | 0.25 |
| **MCRW1A** | 125 V | 50 A | 300 A | 0.13 | 0.10 | 0.22 |
| **MCRW1.5A** | 125 V | 50 A | 300 A | 0.07 | 0.25 | 0.18 |
| **MCRW2A** | 125 V | 50 A | 300 A | 0.054 | 0.27 | 0.24 |
| **MCRW2.5A** | 125 V | 50 A | 300 A | 0.041 | 0.50 | 0.22 |
| **MCRW3A** | 125 V | 50 A | 300 A | 0.031 | 0.9 | 0.20 |
| **MCRW4A** | 125 V | 50 A | 300 A | 0.023 | 1.6 | 0.19 |
| **MCRW5A** | 125 V | 50 A | 300 A | 0.018 | 3 | 0.17 |
| **MCRW7A** | 125 V | 50 A | 300 A | 0.012 | 7 | 0.15 |
| **MCRW10A** | 125 V | 50 A | 300 A | 0.007 | 21 | 0.098 |
| **MCRW12A** | 125 V | 50 A | 300 A | 0.006 | 35 | 0.093 |
| **MCRW15A** | 125 V | 50 A | 300 A | 0.004 | 63 | 0.088 |

* AC Interrupting Rating (Measured at designated voltage, 100%) DC Interrupting Rating (Measured at designated voltage, rise time of less than 50 microseconds, battery source)
** DC Cold Resistance (Measured at 10% of rated current)
† Typical Melting $I^2t$ (Measured with a battery bank at rated DC voltage, 10x-rated current, rise time of calibrated circuit less than 50 microseconds)
‡ Typical Voltage Drop (Measured at rated current after temperature stabilizes)

### TIME CURRENT CURVE




| | PACKAGING CODE |
|---|---|
| **Packaging Code** | **Description** |
| **BK1** | 1,000 pieces in bulk |
| **TR1** | 2,500 pieces on tape-and-reel per EIA-296-E @ 5 mm pitch and 52.4mm inside tape spacing |



OC-2534 Rev. A 5/03

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