

# Subminiature Microtron® Fuses

## MCRS Series, Time-Delay, Wire-in-Air



### Description

- Axial-leaded time-delay thru-hole fuse
- Matte tin-plated copper lead wires
- High temperature epoxy plastic body, UL 94V0

| Electrical Characteristics |                    |
|----------------------------|--------------------|
| % of Amp Rating            | Opening Time       |
| 100%                       | 4 hours minimum    |
| 200%                       | 30 seconds maximum |

### Agency Information

- UL Recognition Guide & File numbers: JDYX2 & E19180.
- CSA Certification Record No: LR 701159 & Class No: 1422 30 and 1422 01.

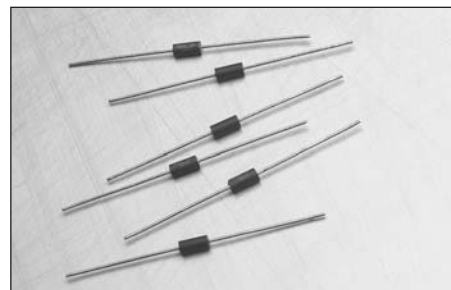
### Environmental Data

- Shock resistance: MIL-STD-202, Method 213B, Test Condition I (Sawtooth)
- Vibration resistance: MIL-STD-202, Method 201 (10-55Hz x 3 axis/ no load)
- Moisture resistance: MIL-STD-202F, Method 106
- Soldering heat resistance: MIL-STD-202, Method 210 Top side (260°C, 20 sec)
- Salt spray: MIL-STD-202, Method 101, Test Condition B (48 Hours)
- Solderability MIL-STD-202, Method 208H
- Operating Temperature: -55°C to 125°C

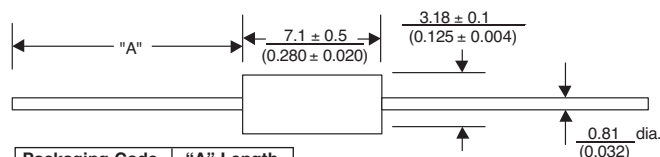
### Ordering

Specify packaging

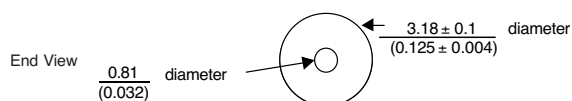
- Insert packaging code prefix before part number.  
E.g., TR1 (or BK1)/MCRS5A



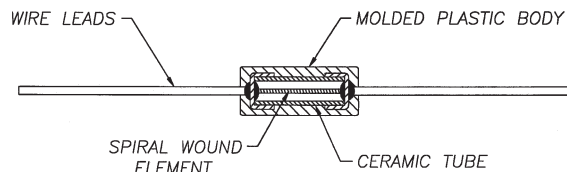
### Dimensions - mm (in)



| Packaging Code | "A" Length |
|----------------|------------|
| BK1            | 1.5"       |
| TR1            | 1.13"      |



### Construction



### Specifications

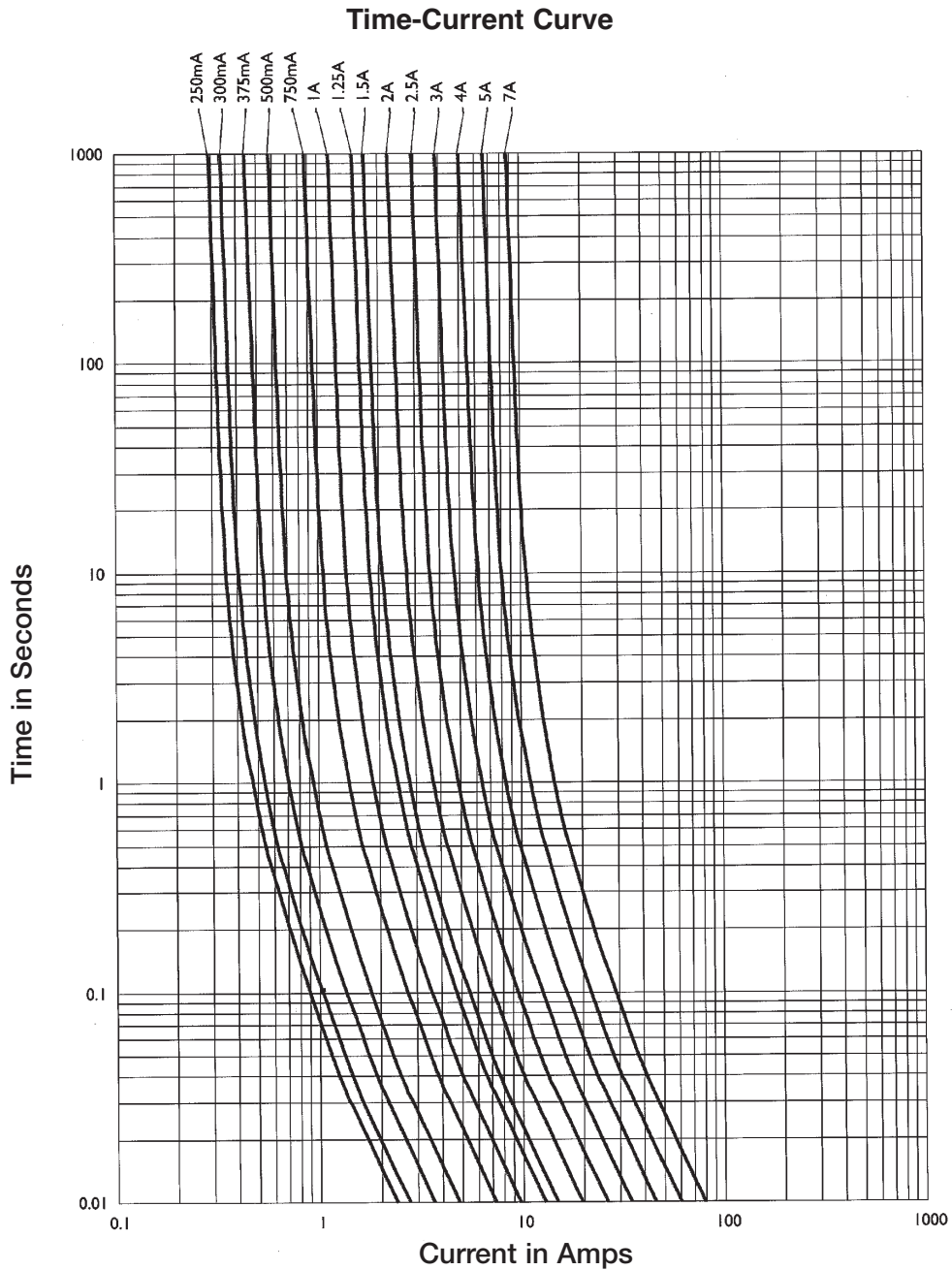
| Part Number | Voltage Rating<br>Vac/dc | Interrupting Rating* (amps) |     | Resistance (Ω)**<br>Typical | Typical Melt I <sup>2</sup> t† | Typical Voltage Drop‡ |
|-------------|--------------------------|-----------------------------|-----|-----------------------------|--------------------------------|-----------------------|
|             |                          | Vac                         | Vdc |                             |                                |                       |
| MCRS250mA   | 125                      | 50                          | 300 | 3.20                        | 0.042                          | 2.20                  |
| MCRS300mA   | 125                      | 50                          | 300 | 2.57                        | 0.056                          | 2.02                  |
| MCRS375mA   | 125                      | 50                          | 300 | 1.66                        | 0.101                          | 1.69                  |
| MCRS500mA   | 125                      | 50                          | 300 | 1.07                        | 0.18                           | 1.42                  |
| MCRS750mA   | 125                      | 50                          | 300 | 0.55                        | 0.44                           | 1.09                  |
| MCRS1A      | 125                      | 50                          | 300 | 0.36                        | 0.78                           | 0.91                  |
| MCRS1.25A   | 125                      | 50                          | 300 | 0.23                        | 1.41                           | 0.77                  |
| MCRS1.5A    | 125                      | 50                          | 300 | 0.18                        | 1.9                            | 0.7                   |
| MCRS2A      | 125                      | 50                          | 300 | 0.12                        | 3.4                            | 0.59                  |
| MCRS2.5A    | 125                      | 50                          | 300 | 0.08                        | 6.1                            | 0.5                   |
| MCRS3A      | 125                      | 50                          | 300 | 0.06                        | 8.1                            | 0.45                  |
| MCRS4A      | 125                      | 50                          | 300 | 0.04                        | 15                             | 0.38                  |
| MCRS5A      | 125                      | 50                          | 300 | 0.02                        | 35                             | 0.29                  |
| MCRS7A      | 125                      | 50                          | 300 | 0.01                        | 63                             | 0.25                  |

\* 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<sup>2</sup>t (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)



| Packaging Code        |  |
|-----------------------|--|
| Packaging Code Prefix | Description  |
| BK1                   | 1,000 fuses in bulk  |
| TR1                   | 2,500 fuses on tape-and-reel per EIA-296-F @ 5 mm pitch and 52.4mm inside tape spacing |

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[TR1/MCRS7A](#) [TR1/MCRS375MA](#) [TR1/MCRS250MA](#) [TR1/MCRS1.25A](#) [TR1/MCRS1.5A](#) [TR1/MCRS3A](#)  
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[BK1/MCRS3.5A](#)