

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.

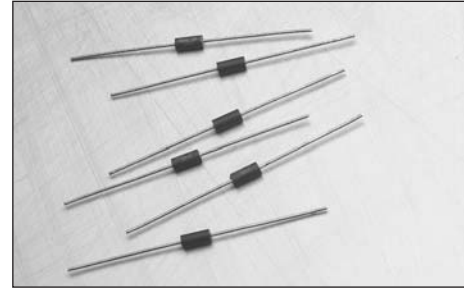
Environmental Data

- 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

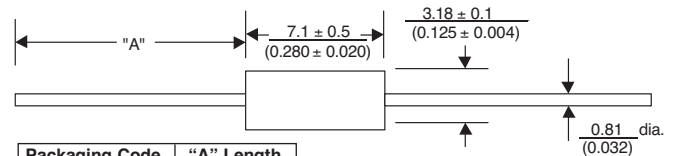
Ordering

Specify packaging

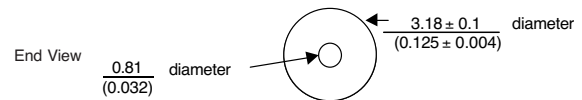
- Insert packaging code prefix before part number.
E.g., TR1 (or BK1)/MCRS5A



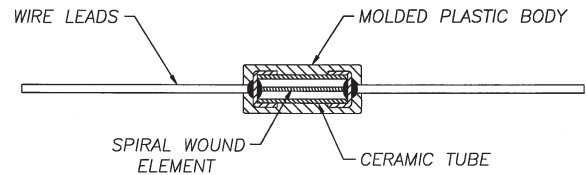
Dimensions - mm (in)



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



Construction



Specifications

Part Number	Voltage Rating Vac/dc	Interrupting Rating* (amps)		Resistance (Ω)** Typical	Typical Melt I ^{††}	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

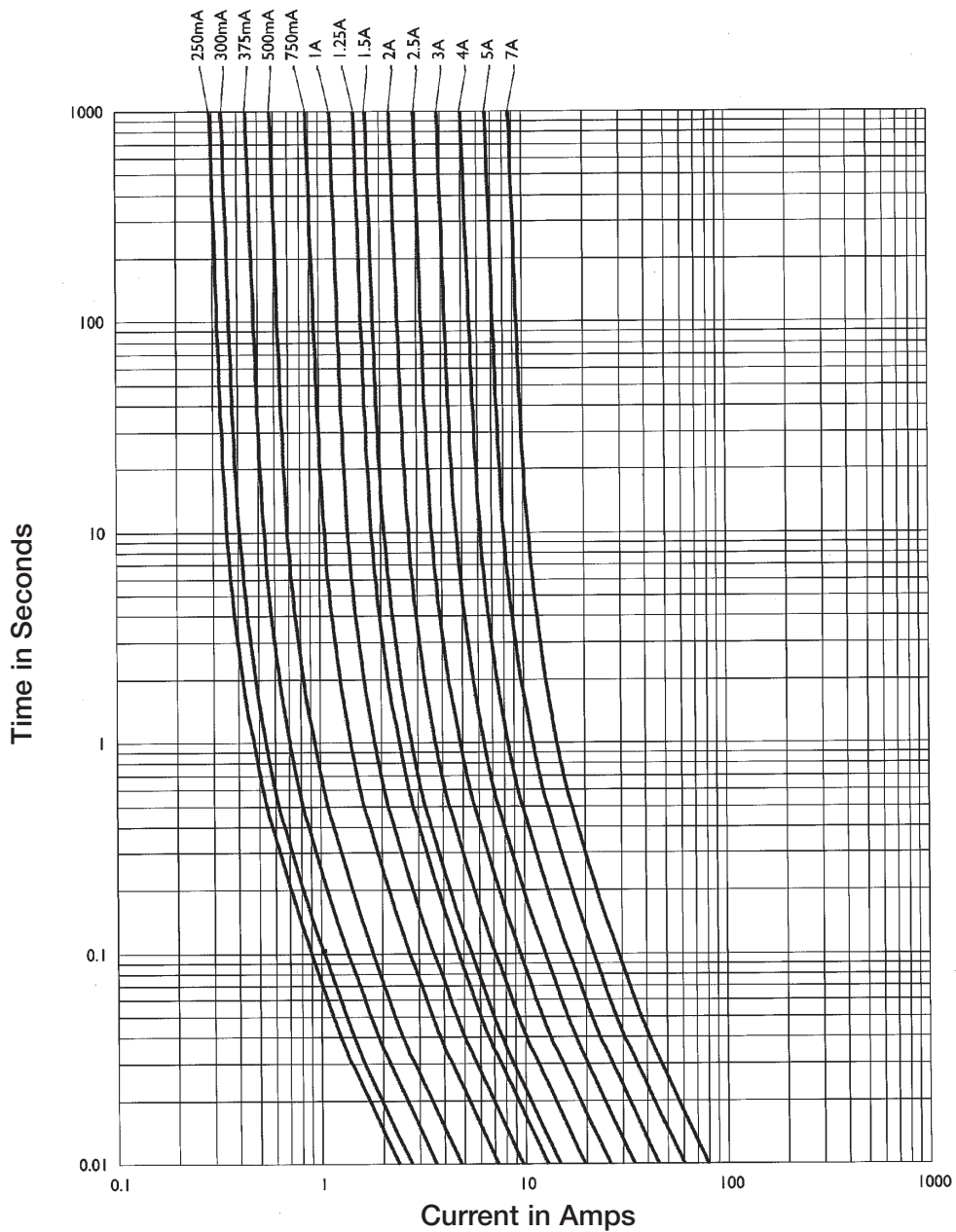
* AC Interrupting Rating (Measured at designated voltage, 100%) DC Interrupting Rating (Measured at designated voltage, rise time of less than 50 microseconds, battery source)

** DC Cold Resistance (Measured at 10% of rated current)

† Typical Melting I^{††} (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 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

The only controlled copy of this Data Sheet is the electronic read-only version located on the Cooper Bussmann Network Drive. All other copies of this document are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Cooper Bussmann reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Cooper Bussmann also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.

Life Support Policy: Cooper Bussmann does not authorize the use of any of its products for use in life support devices or systems without the express written approval of an officer of the Company. Life support systems are devices which support or sustain life, and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.

© 2009 Cooper Bussmann
St. Louis, MO 63178
www.cooperbussmann.com



Mouser Electronics

Authorized Distributor

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

Cooper Bussmann:

[TR1/MCRS1A](#) [TR1/MCRS2A](#) [TR1/MCRS2.5A](#) [TR1/MCRS5A](#) [TR1/MCRS500MA](#) [TR1/MCRS750MA](#) [TR1/MCRS4A](#)
[TR1/MCRS7A](#) [TR1/MCRS375MA](#) [TR1/MCRS250MA](#) [TR1/MCRS1.25A](#) [TR1/MCRS1.5A](#) [TR1/MCRS3A](#)
[TR1/MCRS300MA](#) [BK1-MCRS4A](#) [BK1-MCRS750MA](#) [BK1-MCRS500MA](#) [BK1-MCRS7A](#) [BK1-MCRS375MA](#) [BK1-](#)
[MCRS2A](#) [BK1-MCRS3-5A](#) [BK1-MCRS1A](#) [BK1-MCRS3A](#) [BK1-MCRS1-5A](#) [BK1-MCRS5A](#) [BK1-MCRS2-5A](#)