COOPER Bussmann

Brick™ Fuses

1025FA Series, Fast-Acting

Description

- Fast-acting surface-mount fuse
- Satisfies the EIA/IS-722 Standard
- Solder immersion compatible

Electrical Characteristics	
% of Amp Rating	Opening Time
100%	4 Hours Minimum
200% (250mA-5A)	5 Seconds Maximum
250% (250mA-5A fuse)	1 Second Maximum
200% (7-15A fuse)	20 Seconds Maximum
250% (7-15A fuse)	4 Seconds Maximum

Note: 30vde constant current source required for 200% overload tests on 250mA-1A.

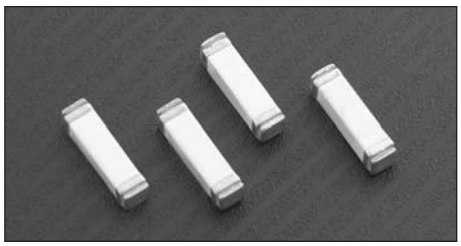
Agency Information

- UL Recognition Guide & File numbers: JDYX2 & E19180 (250mA - 15A)
- CSA Component Acceptance: File # 053787 C000, Class # 1422 30

Environmental Data

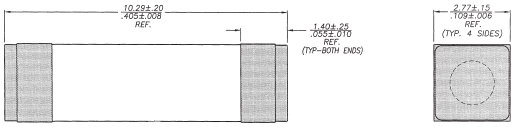
- Life test: MIL-STD-202, Method 108A, Test Condition D
- Load humidity: MIL-STD-202, Method 103B
- Moisture resistance: MIL-STD-202, Method 106E
- Terminal strength: MIL-STD-202, Method 211A
- Thermal shock: MIL-STD-202, Method 107D, air-to-air
- Case resistance: EIA/IS-722
- Resistance to dissolution of metallization: ANSI J-STD-002, Test D
- Mechanical shock: MIL-STD-202, Method 213B with exceptions per EIA/IS-722 Standard
- High frequency vibration: MIL-STD-202, Method 204D, Test Condition D
- Resistance to solvents: MIL-STD-202, Method 215A

RoHS 2002/95/EC

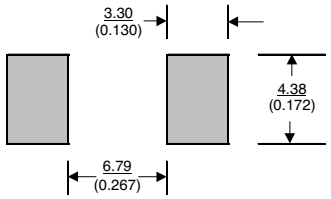


Dimensions – mm/in

Drawing Not to Scale



Recomended Pad Layout – mm (in)



Ordering

- Specify packaging and product code (i.e., TR2/1025FA250-R)

Soldering Method

- Wave solder: 260°C, 10 Sec max.
- Infrared reflow: 260°C, 30 Sec max.

Specifications

Product Code	Current Rating (amps)	Voltage Rating AC	Voltage Rating DC	Interrupting Rating (amps)* 250Vac	125Vdc	60Vdc	DC Cold Resistance** (Ω) Typical	Typical Melting I^2t†	Typical Voltage Drop‡
1025FA250-R	250mA	250V	125V	50	50	-	4.7500	0.1212	2019mV
1025FA500-R	500mA	250V	125V	50	50	-	1.1500	0.0415	1500mV
1025FA750-R	750mA	250V	125V	50	50	-	0.5550	0.143	880mV
1025FA1-R	1	250V	125V	50	50	-	0.2800	1.750	560mV
1025FA1.5-R	1.5	250V	125V	50	50	-	0.1140	1.460	260mV
1025FA2-R	2	250V	125V	50	50	-	0.0750	6.086	258mV
1025FA2.5-R	2.5	250V	125V	50	50	-	0.0510	8.48	232mV
1025FA3-R	3	250V	125V	50	50	-	0.0384	18.15	205mV
1025FA3.5-R	3.5	250V	125V	50	50	-	0.0305	17.83	185mV
1025FA4-R	4	250V	125V	50	50	-	0.0275	23.32	190mV
1025FA5-R	5	250V	125V	50	50	-	0.0195	38.74	180mV
1025FA7-R	7	250V	60V	50	-	50	0.0116	138	150mV
1025FA10-R	10	250V	60V	50	-	50	0.0072	457	146mV
1025FA12-R	12	250V	60V	50	-	50	0.0056	498	120mV
1025FA15-R	15	250V	60V	50	-	50	0.0039	1451	110mV

* AC interrupting rating (measured at designated voltage, 100% power factor random closing); DC interrupting rating (measured at designated voltage, time constant of less than 50 microseconds, battery source)

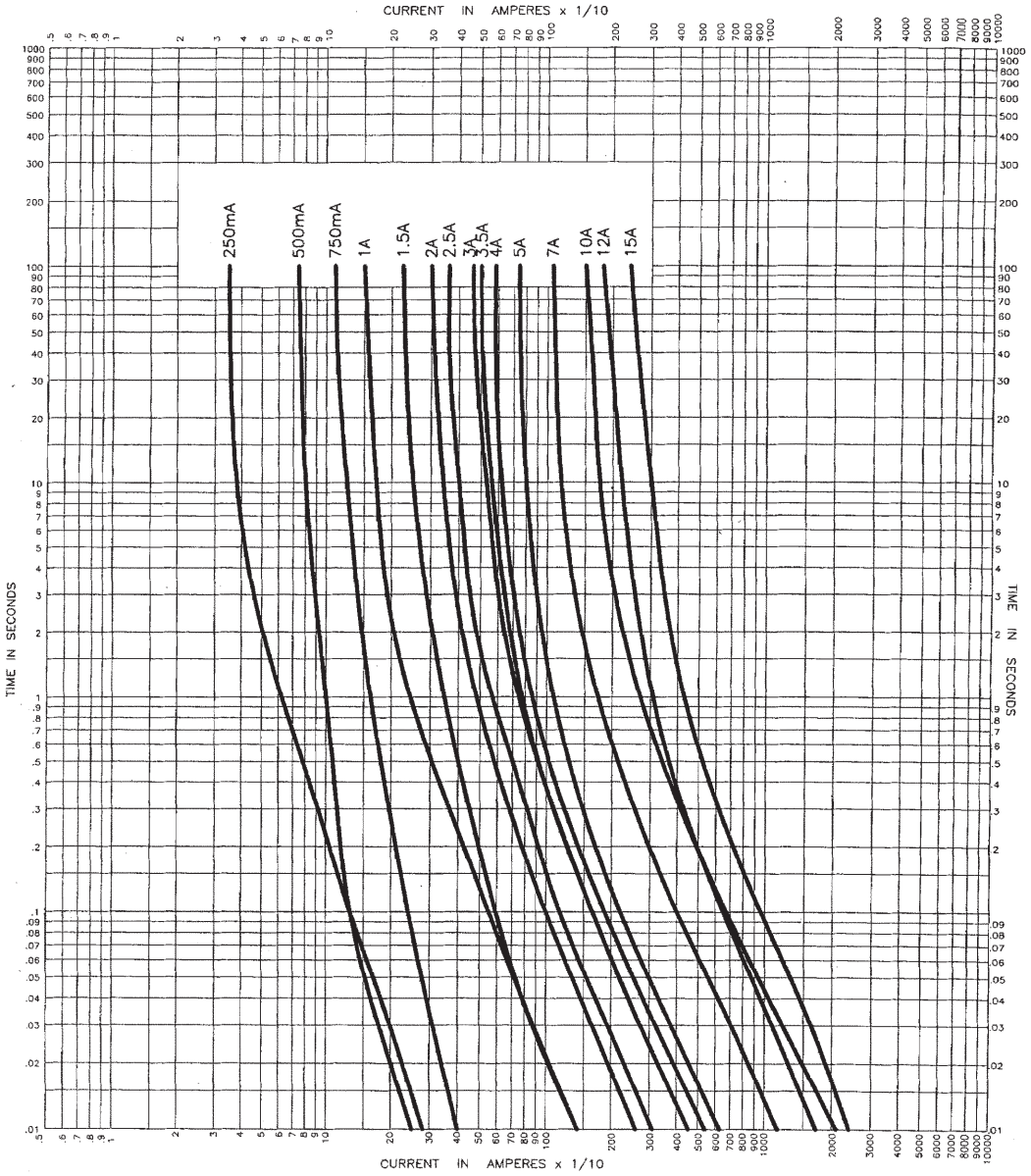
** DC cold resistance (measured at ≤10% of rated current)

† Typical Melting I^2t (measured with a battery bank at rated DC voltage, 10x-rated current, but not exceeding the interrupting rating. Time constant of calibrated circuit less than 50 microseconds). Test current not to exceed interrupting rating of 50A.

‡ Typical voltage drop (measured at rated current after temperature stabilizes)

• 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.

Time Current Curve



Packaging Code	
Packaging Code Prefix	Description
TR2	2,500 fuses on 24mm tape-and-reel on 13 inch (330mm) reel per EIA Standard 481

North America
Cooper Electronic Technologies
1225 Broken Sound Parkway NW
Suite F
Boca Raton, FL 33487-3533
Tel: 1-561-998-4100
Fax: 1-561-241-6640
Toll Free: 1-888-414-2645

Cooper Bussmann
P.O. Box 14460
St. Louis, MO 63178-4460
Tel: 1-636-394-2877
Fax: 1-636-527-1607

Europe
Cooper Electronic Technologies
Cooper (UK) Limited
Burton-on-the-Wolds
Leicestershire • LE12 5TH UK
Tel: +44 (0) 1509 882 737
Fax: +44 (0) 1509 882 786

Cooper Electronic Technologies
Avda. Santa Eulalia, 290
08223
Terrassa, (Barcelona), Spain
Tel: +34 937 362 812
+34 937 362 813
Fax: +34 937 362 719

Asia Pacific
Cooper Electronic Technologies
1 Jalan Kilang Timor
#06-01 Pacific Tech Centre
Singapore 159303
Tel: +65 278 6151
Fax: +65 270 4160