



**THE DATASHEET OF
1025FA4-R**

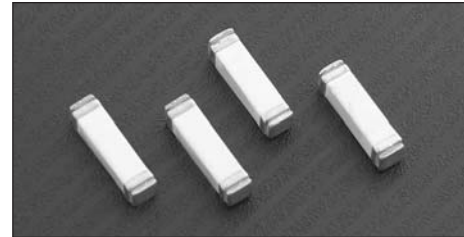


Brick™ Fuses

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

Agency Information

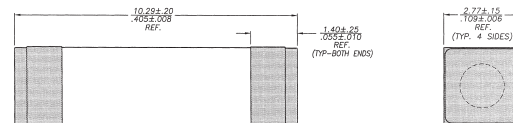
- UL Recognition Guide & File numbers: JDYX2 & E19180 (250mA - 15A)
- CSA Component Acceptance: File # 053787 C000, Class # 1422 30

Environmental Data

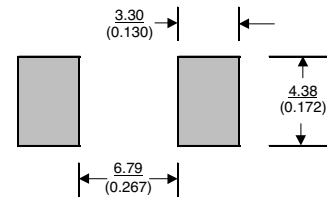
- Life test: MIL-STD-202, Method 108A, Test Condition D
- Load humidity: MIL-STD-202, Method 103B
- Moisture resistance: MIL-STD-202, Method 106E
- Terminal strength: MIL-STD-202, Method 211A
- Thermal shock: MIL-STD-202, Method 107D, air-to-air
- Case resistance: EIA/IS-722
- Resistance to dissolution 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

Dimensions – mm/in

Drawing Not to Scale



Recommended 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		Interrupting Rating (amps)*			DC Cold Resistance** (Ω) Typical	Typical Melting I ² t†	Typical Voltage Drop‡
		AC	DC	250Vac	125Vdc	60Vdc			
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)

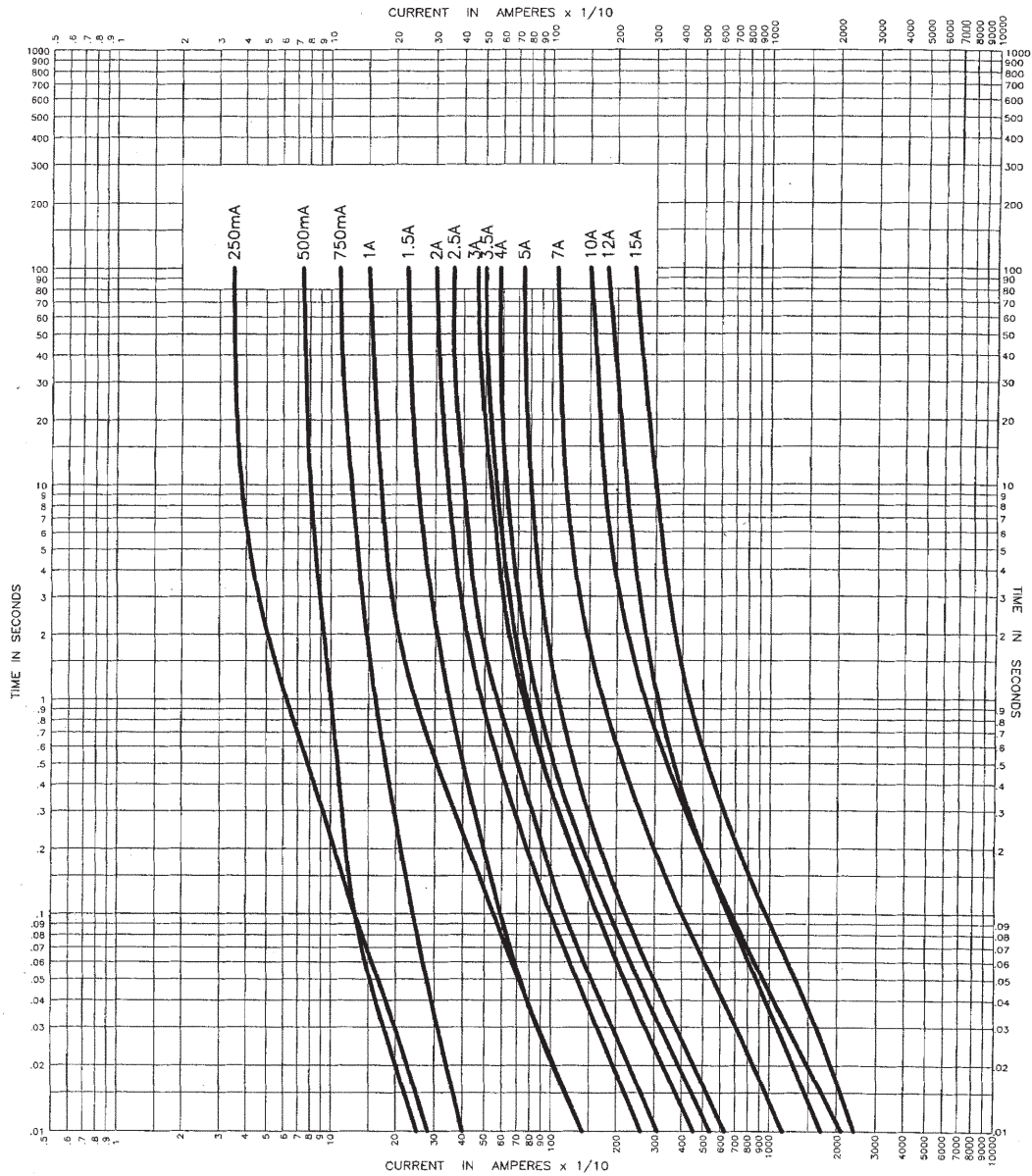
** DC cold resistance (measured at ≤10% of rated current)

† Typical Melting I²t (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

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.

© 2008 Cooper Bussmann
 St. Louis, MO 63178
 www.cooperbussmann.com



Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

 [View 1025FA4-R on WIN SOURCE](#)

 [Eaton Bussmann Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management