# Technical Data 4322

Effective May 2017 Supersedes March 2008

# 1025FA Fast-acting surface mount fuse



BUSSMANN SERIES



#### **Product features**

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

#### Agency information

- UL Recognition Guide & File numbers: JDYX2 & E19180 (250mA - 15A)
- CSA Component Acceptance: File # 053787 C000, Class # 1422 3

#### Soldering method

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

## Ordering

 Specify packaging and product code (i.e., TŔ2/1025FA250-R)

### **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, airto-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

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.

				Specif	ications				
	Current	Volt	age		nterrupting	9	DC Cold	Typical	Typical
Product Code	Rating	ng Rating Rating (amps)*		5)*	Resistance** (Ω)	Melting	Voltage		
	(amps)	AC	DC	250Vac	125Vdc	60Vdc	Typical	l²t†	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

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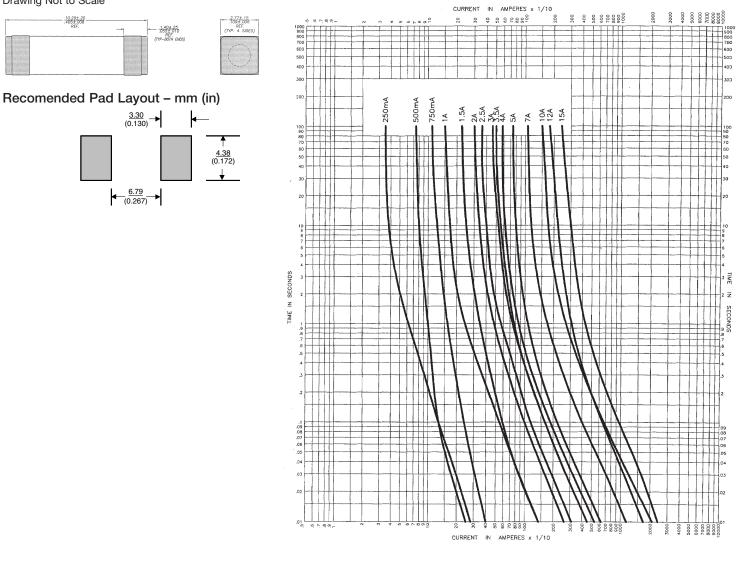
Ac interrupting rating (measured at designated voltage, 100% power lactor random closing); DC interrupting rating (measured at designated voltage, time constant of less than 50 microseconds, battery source) <sup>1</sup> DC cold resistance (measured at  $\leq$ 10% of rated current) Typical Melting I <sup>2</sup> (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) Pure designated at the purchase of the purchase of the purchase of purchase of the purchase of t

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.



# Dimensions - mm/in Drawing Not to Scale 10.29±.20 .405±.008 REF.

## **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			

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