Technical Data 3001

Effective October 2017 Supersedes May 2017

3216FF Fast-acting Chip[™] surface mount fuse



BUSSMANN



Product features

- AEC-Q200 gualified (250 mA to 7 A)
- Fast-acting surface mount fuse
- Ratings up to 30 amps
- Excellent temperature and cycling characteristics
- · Compatible with reflow and wave solder

Agency information

- UL Recognition Guide JDYX2 & File E19180.
- CSA Component Acceptance: 053787 C 000 & Class No: 1422 30.
- cURus Recognition File: E19180, Guide JDYX2/ JDYX8

Soldering method

- Wave Immersion: 260 °C, 10 sec max. Infrared Reflow: 260 °C, 30 sec max.

Environmental data

- Thermal Shock: MIL-STD-202, Method 107, Test Condition B (-65 °C to +125 °C)
- Vibration: MIL-STD-202, Method 204, Test Condition C (55 Hz - 2 kHz, 10 G)
- Moisture Resistance: MIL-STD-202, Method 106,10 day cycle
- Solderability: ANSI/J-STD-002, Test B
- Additional resistance to solder heat test: MIL-STD-202G Method 210F Condition A
- Operating Temperature: -55 °C to +125 °C
- AEC-Q200 qualified (250 mA to 7 A) •

Ordering

Specify packaging and product code (i.e., TR/3216FF250-R)

Electrical Characteristics						
Amp Rating	% of Amp Rating	Opening Time				
250mA - 30A	100%	4 Hrs. Min.				
1.25A - 3A	200%	60 Sec. Max.				
250mA - 3A	250%	5 Sec. Max.				
4A - 7A	350%	1 Sec. Max.				
10A - 30A	350%	5 Sec. Max.				

				Specificatio	ons				
Part Volt Ratings		Interrupting Rating*	Typical DC Cold	Typical Melt	Typical Voltage	Agency Approvals			
Number	Vac	Vdc	(amps) AC/DC	Resistance (Ω)**	I2t (A2S) DC***	Drop (V)†	UR	CSA	cURus
3216FF250-R	32	63	50	3.5000	0.00038	1.40	Х	Х	
3216FF375-R	32	63	50	1.7500	0.00077	0.73	Х	Х	
3216FF500-R	32	63	50	0.9800	0.00190	0.66	Х	Х	
3216FF750-R	32	63	50	0.5400	0.0053	0.63	Х	Х	
3216FF1-R	32	63	50	0.2190	0.030	0.20	Х	Х	
3216FF1.25-R	32	63	50	0.1700	0.046	0.18	Х	Х	
3216FF1.5-R	32	63	50	0.1190	0.093	0.18	Х	Х	
3216FF2-R	32	63	50	0.0660	0.126	0.16	Х	Х	
3216FF2.5-R	32	63	50	0.0460	0.260	0.14	Х	Х	
3216FF3-R	32	63	50	0.0360	0.275	0.13	Х	Х	
3216FF4-R	32	32	50	0.0180	0.337	0.11	Х	Х	
3216FF4.5-R	32	32	50	0.0160	0.405	0.10	Х	Х	
3216FF5-R	32	32	50	0.0140	0.534	0.09	Х	Х	
3216FF6.5-R	32	32	50	0.0086	2.294	0.076	Х	Х	
3216FF7-R	32	32	50	0.0070	3.623	0.078	Х	Х	
3216FF10-R		24	150	0.0045	2.0	0.062	Х		Х
3216FF12-R		24	150	0.0039	7.0	0.070	Х		Х
3216FF15-R		24	150	0.0031	25.5	0.066	Х		Х
3216FF20-R		24	150	0.0018	48.6	0.060	Х		Х
3216FF25-R		24	250	0.0014	32.0	0.057	Х		Х
3216FF30-R		24	300	0.0012	43.0	0.068	Х		Х

*AC Interrupting Rating measured at rated voltage with a unity power factor; DC Interrupting Rating measured at rated voltage, time constant of less than 50 microseconds, battery source **Typical DC Cold Resistance measured at 10% of rated current

***Typical Melting I2t measured with a battery bank at rated DC voltage, 10x-rated current, not to exceed IR, time constant of calibrated circuit less than 50 microseconds (6.5A - 30A measured at interrupting rating) +Typical Voltage Drop measured at rated current after temperature stabilizes. It is recommended that fuses be mounted with ceramic (white) side facing up 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.





Packaging		
Packaging Code Prefix	Description	
TR	3000 fuses on 8mm tape-and-reel on a 7 inch (178mm) reel per EIA Standard RS481	

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Eaton Electronics Division 1000 Eaton Boulevard Cleveland, OH 44122 United States www.eaton.com/electronics

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