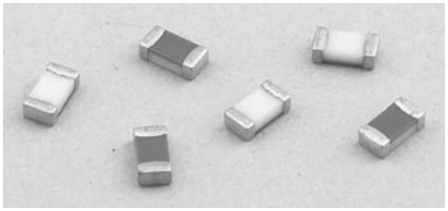
3216FF

Fast-acting Chip™ surface mount fuse



Product features

- AEC-Q200 qualified (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
- Moisture sensitivity level (MSL): 1

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

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.

Specifications

Part number	Current rating (A)	Voltage rating (Vac)	Voltage rating (Vdc)	Interrupting rating*	Typical DC cold resistance (Ω)**	Typical melting I²t (A²s) DC***	Typical Voltage Drop (V)†	Marking	Agency Approvals UR	CSA	cURus
3216FF250-R	0.25	32	63	50 Aac/Adc	3.50	0.00038	1.40	.25	X	X	
3216FF375-R	0.375	32	63	50 Aac/Adc	1.75	0.00077	0.73	E	X	X	
3216FF500-R	0.5	32	63	50 Aac/Adc	0.980	0.00190	0.66	0.5	X	X	
3216FF750-R	0.75	32	63	50 Aac/Adc	0.540	0.0053	0.63	.75	X	X	
3216FF1-R	1.0	32	63	50 Aac/Adc	0.219	0.030	0.20	1	X	X	
3216FF1.25-R	1.25	32	63	50 Aac/Adc	0.170	0.046	0.18	▲	X	X	
3216FF1.5-R	1.5	32	63	50 Aac/Adc	0.119	0.093	0.18	1.5	X	X	
3216FF2-R	2.0	32	63	50 Aac/Adc	0.066	0.126	0.16	2	X	X	
3216FF2.5-R	2.5	32	63	50 Aac/Adc	0.046	0.260	0.14	2.5	X	X	
3216FF3-R	3.0	32	63	50 Aac/Adc	0.036	0.275	0.13	3	X	X	
3216FF4-R	4.0	32	32	50 Aac/Adc	0.018	0.337	0.11	4	X	X	
3216FF4.5-R	4.5	32	32	50 Aac/Adc	0.016	0.405	0.10	4.5	X	X	
3216FF5-R	5.0	32	32	50 Aac/Adc	0.014	0.534	0.09	5	X	X	
3216FF6.5-R	6.5	32	32	50 Aac/Adc	0.0086	2.294	0.076	6.5	X	X	
3216FF7-R	7.0	32	32	50 Aac/Adc	0.0070	3.623	0.078	7	X	X	
3216FF10-R	10		24	150 Adc	0.0045	2.0	0.062	10	X		X
3216FF12-R	12		24	150 Adc	0.0039	7.0	0.070	12	X		X
3216FF15-R	15		24	150 Adc	0.0031	25.5	0.066	15	X		X
3216FF20-R	20		24	150 Adc	0.0018	48.6	0.060	20	X		X
3216FF25-R	25		24	250 Adc	0.0014	32	0.057	25	X		X
3216FF30-R	30		24	300 Adc	0.0012	43	0.068	30	X		X

*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.

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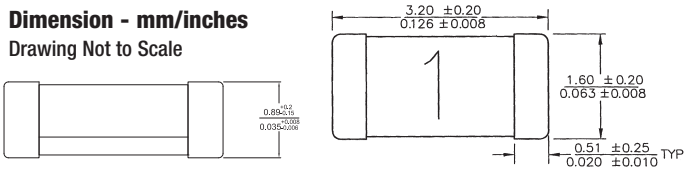
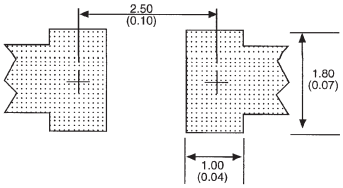
Dimension - mm/inches
Drawing Not to Scale



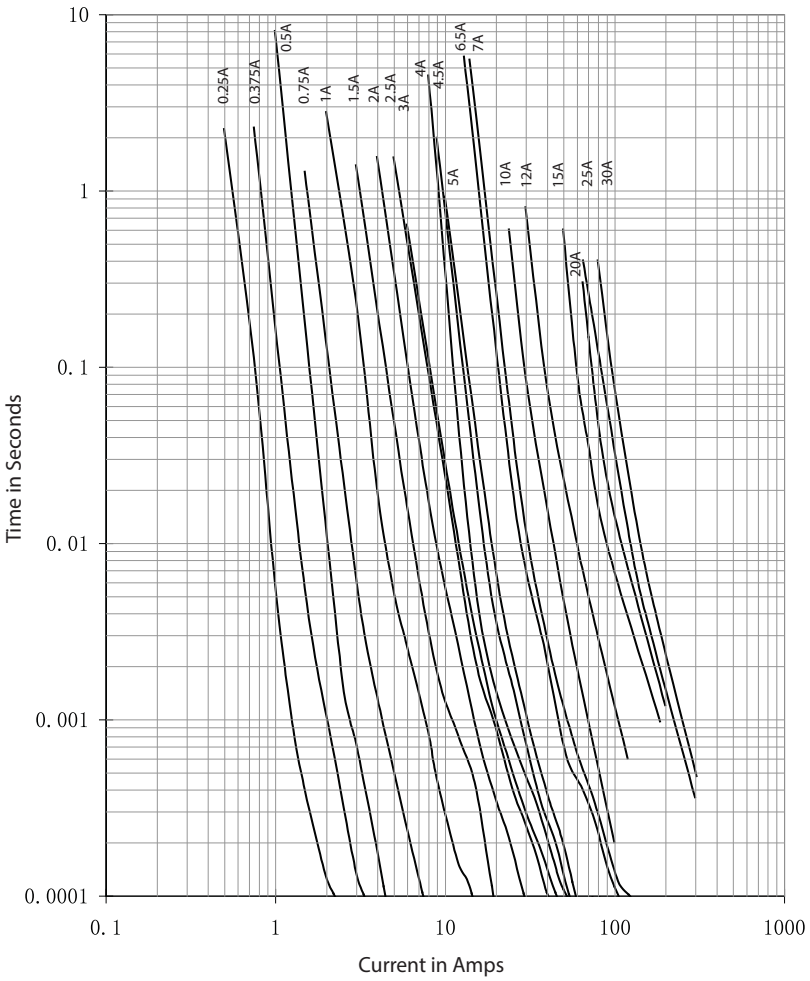
Recommended Pad Layout - mm (in)



Soldering method

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

Time-Current Curve



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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