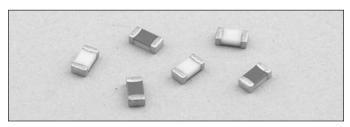


# Chip<sup>™</sup> Fuses 3216FF Series, Fast-Acting









#### **Description**

- 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.
- c 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 (55Hz - 2kHz, 10G)
- Moisture Resistance: MIL-STD-202, Method 106, 10 day cycle
- Solderability: ANSI/J-STD-002, Test B
- Additional resistance to solder heat teast: MIL-STD-202G Method 210F Condition A

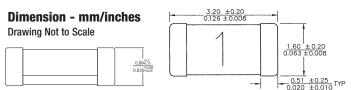
#### **Ordering**

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

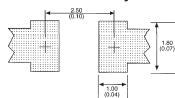
#### **Soldering Method**

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

	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.					



## Recommended Pad Layout - mm (in)



Specifications									
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	0.001	43.0	0.068	Х		Х

<sup>\*</sup> 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

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

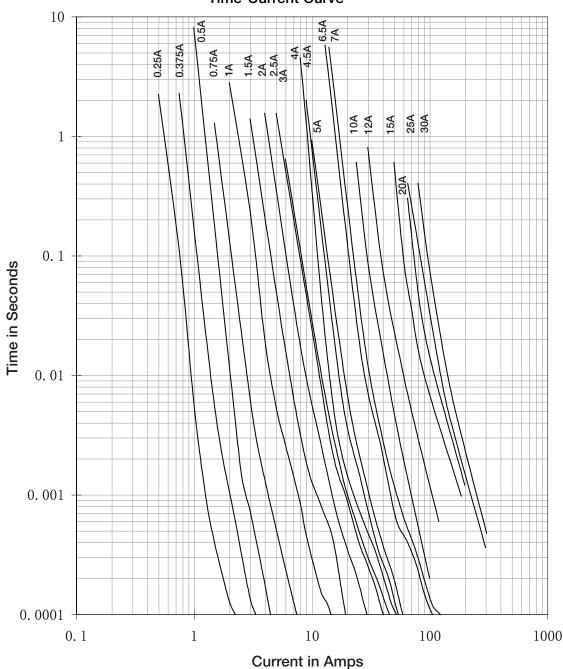


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<sup>\*\*</sup>Typical DC Cold Resistance measured at 10% of rated current

<sup>\*\*\*</sup>Typical Melting I<sup>2</sup>t 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.

# **Time-Current Curve**



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

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