

3x8.4mm Fast-Acting, Ceramic Tube Fuses for Barrier Applications

C308F Series



Description

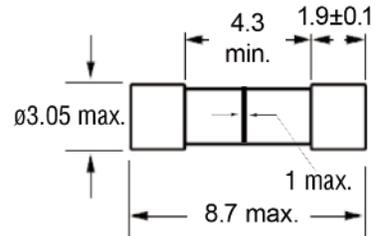
A compact 3x8.4mm size provides a space-saving alternative to conventional fuse solutions with high interrupting rating for primary and secondary circuit protection up to 250 volts AC or DC and 250mA. Ceramic tube construction.

Features

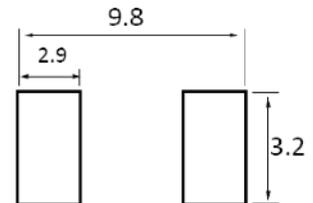
- RoHS compliant
- Fast-acting, high breaking capacity of 4000 amps
- 3x8.4mm physical size
- Ceramic tube, silver-plated brass endcap construction
- Meets Standards (EN60079-11) for hazardous applications

Electrical Characteristics		
Rated Current	Amp Rating	Opening Time
50mA~250mA	110%	4 Hours, Minimum
	300%	10 Seconds, Maximum
	1000%	0.002 Seconds, Maximum

Dimensions - mm (Drawing Not to Scale)



Recommended Pad Layout



Agency Information

- cURus: Guide JDYX2, File E 19180 and Guide JDYX8, File E19180

Applications

- Gas meters
- Oil drilling and refineries
- Hazardous environments
- Intrinsically safe barriers

Ordering

- Specify product and packaging code (e.g., C308F-160mA-TR)

Specifications

Catalog Number	Voltage Rating Vac/dc	Color Coding	Interrupting Rating @ 250Vac/dc (Amps)*	Typical DC Cold Resistance (Ω)**	Typical Melting I ² t***	Agency Information cURus
C308F-50mA	250	Red	4000	9.40	0.000489	X
C308F-80mA	250	Green	4000	5.10	0.000500	X
C308F-100mA†	250	Yellow	4000	2.87	0.000870	X
C308F-160mA	250	Violet	4000	2.05	0.001660	X
C308F-200mA	250	Brown	4000	1.01	0.0024	X
C308F-250mA	250	Black	4000	0.71	0.0053	X

* AC Interrupting Rating (4000A, PF = 0.4); DC Interrupting Rating measured at rated voltage, time constant 4 microseconds, battery source.

** DC Cold Resistance (Measured at ≤10% of rated current).

*** Typical I²t measured at 10I_n.

† Catalog number C308F-100 is for low thermal EMF revision.

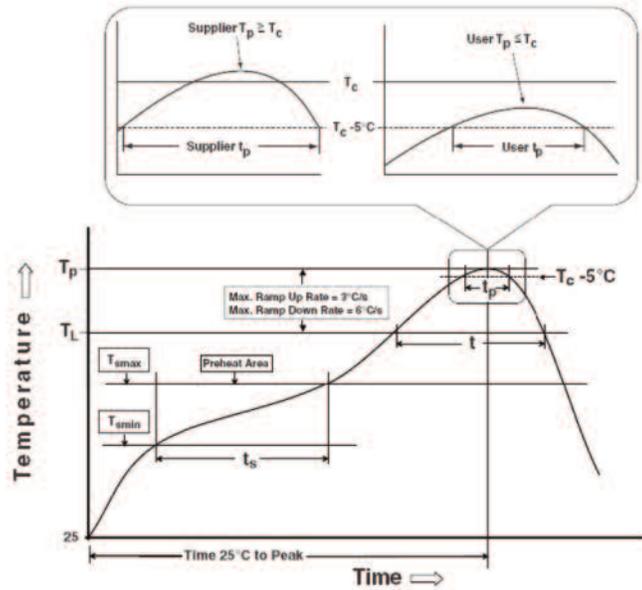
Environmental Specifications:

- Thermal Shock: MIL-STD-202G, Method 107G (Test Condition 5 cycles -55°C to 125°C)
- Resistance to Solder Heat: MIL-STD-202G Method 210F
- Vibration: MIL-STD-202G, Method 201A (10~55Hz) Condition A
- Solderability: J-STD-002C, Test Method C1
- Component Life Reliability: 125°C, 500h

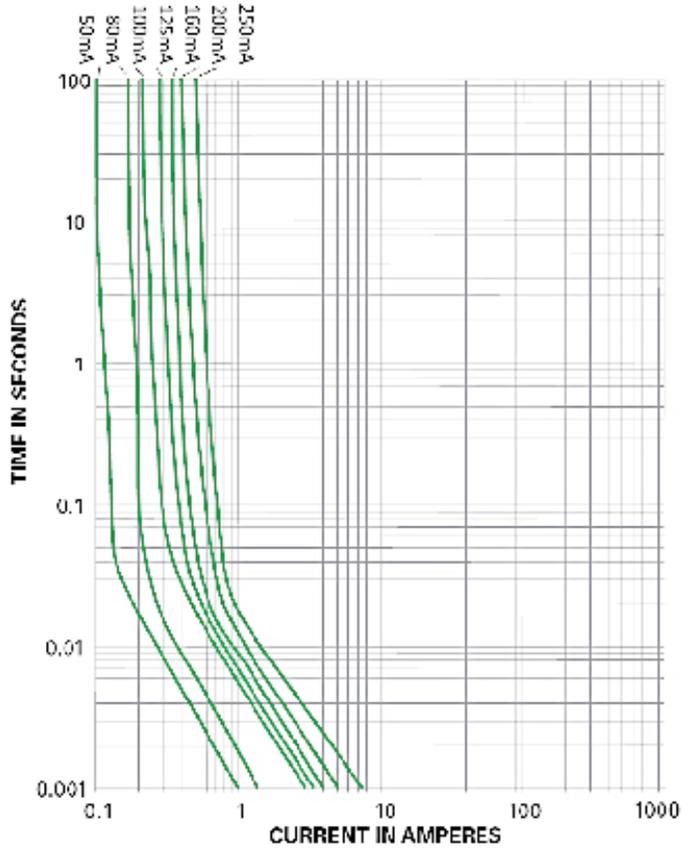
Soldering Parameters

- Reflow Solder: JEDEC J-STD-202D $T_c = 250^\circ\text{C}$. $T_p = 30\text{s}$
- Wave Solder: Not recommended
- Manual Solder: Not recommended

Recommended Reflow Solder Profile



Average Time-Current Curves



Packaging Code	
Packaging Code Suffix	Description
-TR	500 Fuses on tape and reel

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