

PRODUCT DATASHEET

Nano Fuse · Surface Mount



## JFC0402FS FAST ACTING FUSE



## Description

JFC0402FS Series are fast acting fuse, The chip fuses set the industry standard for performance, reliability and quality. The solder-free design provides excellent on-off and temperature cycling characteristics and also makes our chip fuses more heat and shock tolerant than typical subminiature fuses.

#### **Features**

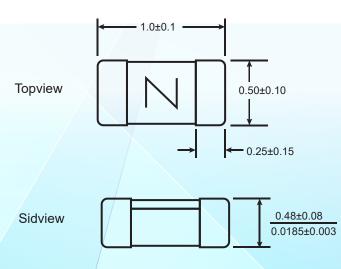
- Fast acting for excessive current
- Compatible with reflow and wave solder
- Ceramic and glass construction
- Excellent environmental integrity
- One time positive disconnect
- Lead Free and Halogen free material

#### **Electrical Characteristics** -

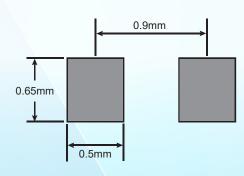
Rated Current	1.0In	2.5In	3.5In
1A~4A	4 hour min.	5 sec max.	-
200mA~750mA	4 Hour Hills	-	5 sec max.

#### **Dimensions**

Drawing not to scale (Unit:mm/inch)



## Recommended land pattern:



Print solder in thickness of 0.08mm to 0.10mm



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## **Performance Specifications**

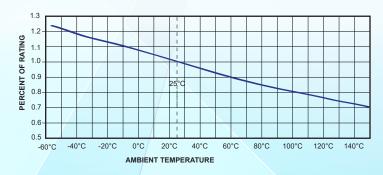
Part No.	Rated Current (A)	Rated Voltage DC	Interrupting Rating*	Resistance (mΩ)Typ**	Typical Melt I²t (A²sec)***
JFC0402-0200FS	0.20			2250	0.0006
JFC0402-0250FS	0.25			1500	0.0010
JFC0402-0315FS	0.315			1000	0.0014
JFC0402-0375FS	0.375			780	0.0018
JFC0402-0500FS	0.50			500	0.0043
JFC0402-0750FS	0.75	32V	35A	220	0.0110
JFC0402-1100FS	1.00			130	0.040
JFC0402-1125FS	1.25			100	0.048
JFC0402-1150FS	1.50			78	0.060
JFC0402-1200FS	2.00			40	0.130
JFC0402-1250FS	2.50			24	0.200
JFC0402-1300FS	3.00			18	0.330
JFC0402-1350FS	3.50			14	0.450
JFC0402-1400FS	4.00			11	0.600

- \* DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)
- \*\* DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25°C
- \*\*\* Typical Melting I²t (Measured with a battery bank at rated DC voltage, Measured at 1ms open time, time constant of calibrated circuit less than 50 microseconds).

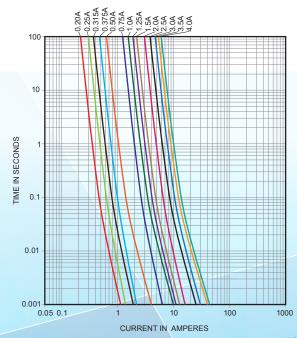
#### **Environmental Characteristic**

- Normal ambient temperature: 23+/-3°C
- Operating temperature: -55°C ~ 150°C, with proper correction factor applied.

#### **Temperature Derating Curve**



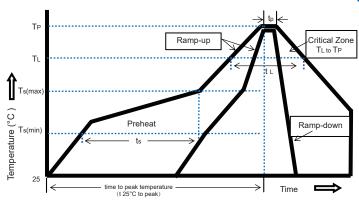
# **Average Time-Current Curve**





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#### **Soldering Parameters**



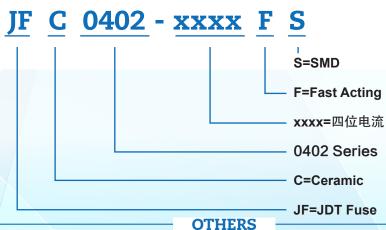
Soldering Method		Parameter	
Wave solder	Reservoir temperature	260°C	
	Time in reservoir	10 Secs max	
Infrared reflow	Temperature	260°C	
	Time	30 Secs max	

Profile Feature		Lead(Pb) free solder
Preheat and soak	Temperature min (T <sub>smin</sub> )	150°C
	Temperature max (T <sub>smax</sub> )	200°C
	Time (Tsmin to Tsmax)(ts)	60-120 Secs
Average ramp up rate Tsmax to Tp		3°C/Secs Max
Liquidous temperature(TL) Time at liquidous(tL)		217°C 60-150 Secs
Peak package body temperature (T <sub>P</sub> )		260°C
Time (t <sub>P</sub> ) within 5°C of the specified calssification temperaturea(Tc)		30 Secs
Average ramp-down rate (TP to Tsmax)		6°C/Secs Max
Time (25°C to Peak Temperature)		8 Minutes Max

# **Packing**

No.	Quantity &Packaging Code	
JFC0402FS	10000 fuses/reel	
	(8mm tape-and-reel on a 7 inch (178mm) reel per EIA Standard 481)	

# Part Numbering System



- If in use beyond the requirements of the specifications, must pass through the mutual confirmation!
- If the specification is not appropriate, must through consultation between the two sides and by the company to modify.
- It could be in conformance with another file which made by our company.