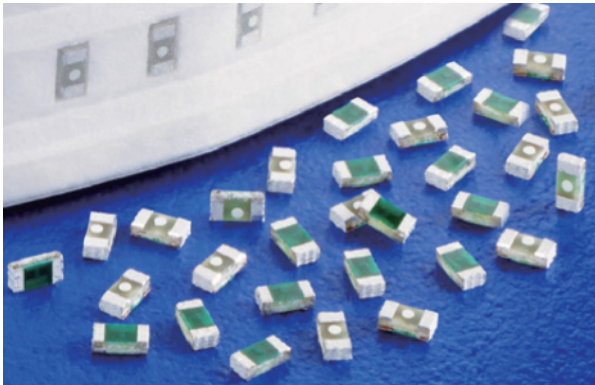


为您的产品保驾护航

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

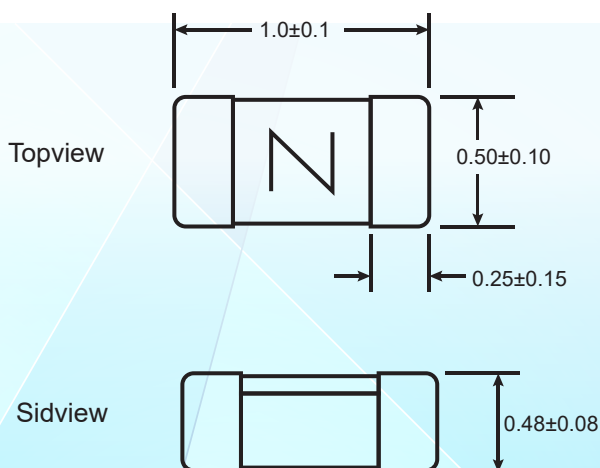
- Fast acting for excessive current
- Compatible with reflow and wave solder
- Ceramic and glass construction
- Excellent environmental integrity
- One time positive disconnect
- Lead Free and Halogen free material

## Electrical Characteristics

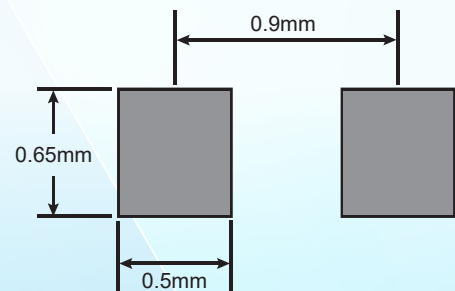
Rated Current	1.0In	2.5In	3.5In
1A~5A	4 hour min.	5 sec max.	-
200mA~750mA		-	5 sec max.

## Dimensions

Drawing not to scale (Unit:mm)



Recommended land pattern:



Print solder in thickness of 0.08mm to 0.10mm

**Performance Specifications**

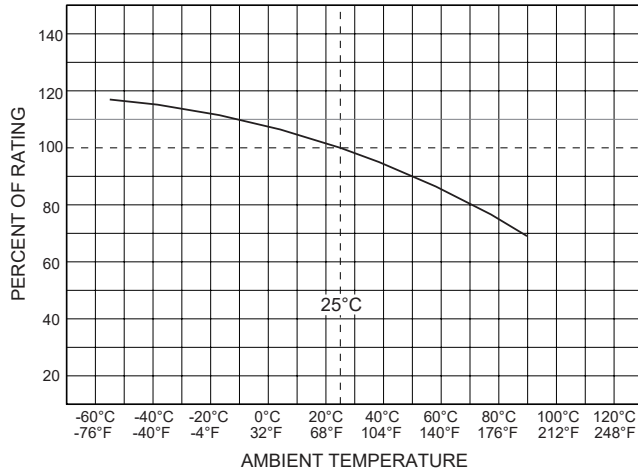
Part No.	Rated Current (A)	Rated Voltage DC	Interrupting Rating*	Resistance (mΩ)Typ**	Typical Melt I <sup>2</sup> t (A <sup>2</sup> sec)***
JFC0402-0200FS	0.20	32V	35A	2250	0.0006
JFC0402-0250FS	0.25			1500	0.0010
JFC0402-0315FS	0.315			1000	0.0014
JFC0402-0375FS	0.375			780	0.0018
JFC0402-0500FS	0.50			500	0.0043
JFC0402-0750FS	0.75			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
JFC0402-1500FS	5.00			8.5	0.720

- \* 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 I<sup>2</sup>t (Measured with a battery bank at rated DC voltage, Measured at 1ms open time, time constant of calibrated circuit less than 50 microseconds).

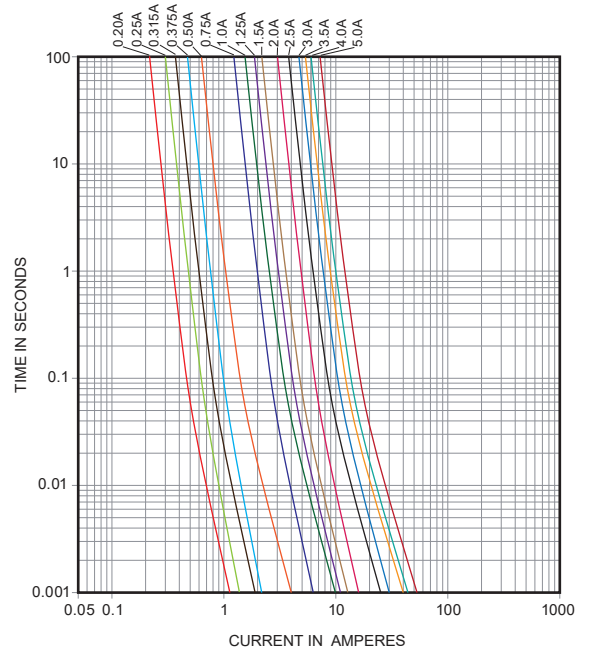
## Environmental Characteristic

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

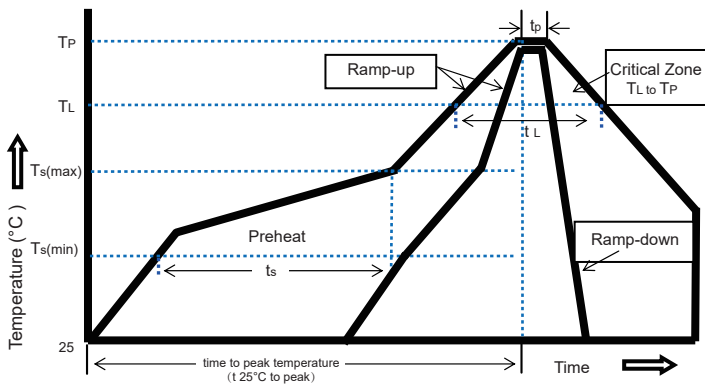
### Temperature Derating Curve



### Average Time-Current Curve



## Soldering Parameters



Profile Feature		Lead(Pb) free solder
Preheat and soak	Temperature min ( $T_{smin}$ )	150°C
	Temperature max ( $T_{smax}$ )	200°C
	Time ( $T_{smin}$ to $T_{smax}$ )( $t_s$ )	60-120 Secs
Average ramp up rate $T_{smax}$ to $T_P$		3°C/Secs Max
Liquidous temperature( $T_L$ )		217°C
Time at liquidous( $t_L$ )		60-150 Secs
Peak package body temperature ( $T_P$ )		260°C
Time ( $t_P$ ) within 5°C of the specified classification temperature( $T_C$ )		30 Secs
Average ramp-down rate ( $T_P$ to $T_{smax}$ )		6°C/Secs Max
Time (25°C to Peak Temperature)		8 Minutes Max

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

## Packing

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

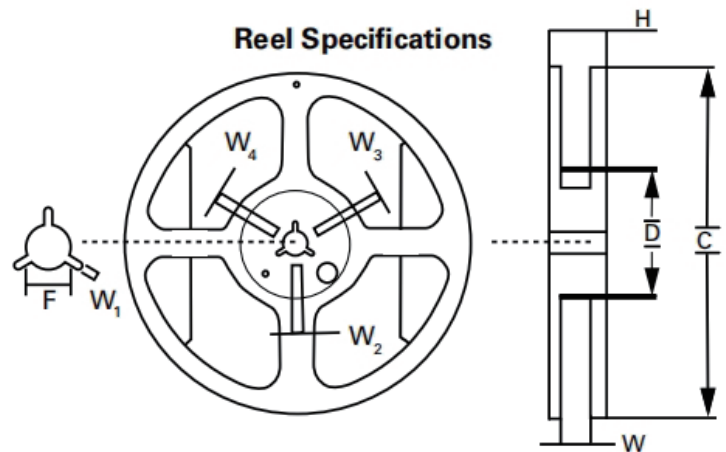
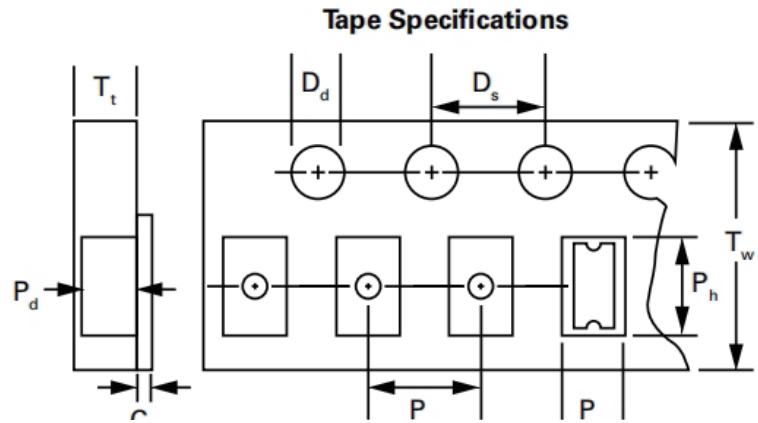
## Tape And Reel Specifications (mm)

### Tape Specifications

Ct	0.05 ± 0.01
Dd	1.5 ± 0.1
Ds	4.0 ± 0.1
Pd	0.41 ± 0.1
Ph	1.12 ± 0.1
Ps	2.0 ± 0.1
Pw	0.65 ± 0.03
Tt	0.61 ± 0.1
Tw	8.0 ± 0.1

### Reel Dimensions

H	12.0 ± 0.5
W	9.0 ± 0.5
D	φ60 ± 0.5
F	φ13.0 ± 0.2
C	φ178 ± 1
W1	2.2 ± 0.5
W2	3.0 ± 0.5
W3	4.0 ± 0.5
W4	5.5 ± 0.5



## Part Numbering System

**JF C 0402 - xxxx F S**

S=SMD

F=Fast Acting

xxxx=Rate Current

0402 Series

C=Ceramic

JF=JDT Fuse

### OTHERS

- 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.