

为您的产品保驾护航

PRODUCT DATASHEET

Nano Fuse · Surface Mount

JFC0402TS TIME-LAG FUSE



Description

JFC0402TS Series are time-lag 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

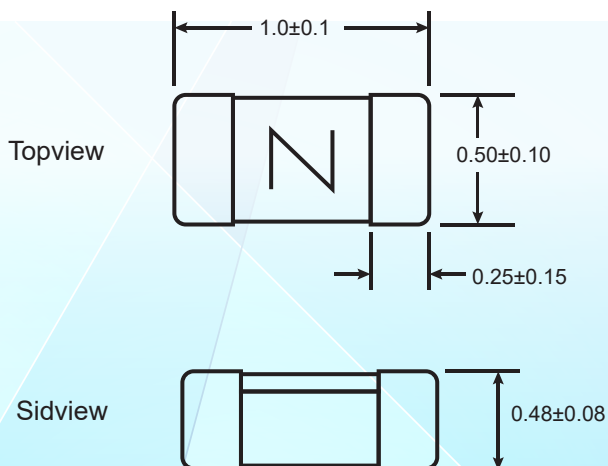
- Time-lag for excessive current
- Compatible with reflow and wave solder
- Ceramic and glass construction
- Excellent environmental integrity
- One time positive disconnect
- Lead Free and Halogen free material

Electrical Characteristics

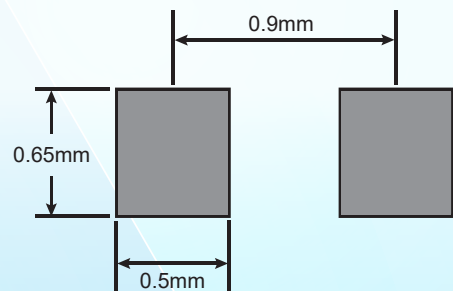
Rated Current	1.0In	2.5In	3.5In
1A~4A	4 hour min.	30 sec max.	-
200mA~750mA		-	30 sec max.

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 ² t (A ² sec)***
JFC0402-0200TS	0.20	32V	35A	2130	0.00068
JFC0402-0250TS	0.25			1352	0.0013
JFC0402-0315TS	0.315			936	0.0016
JFC0402-0375TS	0.375			713	0.0021
JFC0402-0500TS	0.50			458	0.0047
JFC0402-0750TS	0.75			202	0.013
JFC0402-1100TS	1.0			123	0.045
JFC0402-1150TS	1.5			73.0	0.071
JFC0402-1200TS	2.0			36.0	0.15
JFC0402-1250TS	2.5			22.0	0.23
JFC0402-1300TS	3.0			16.0	0.37
JFC0402-1350TS	3.5			12.0	0.51
JFC0402-1400TS	4.0			9.8	0.68

* DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)

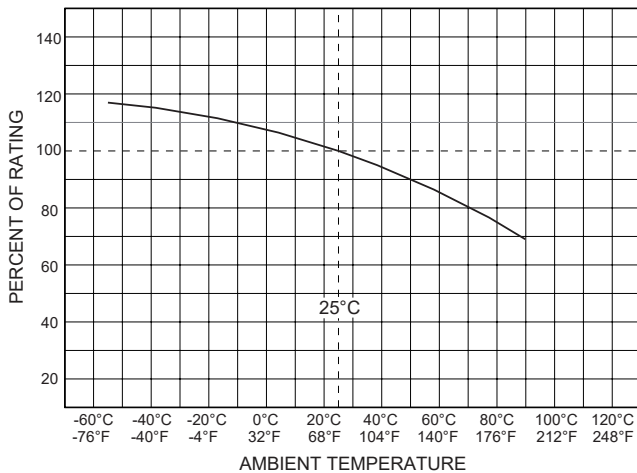
** DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25°C

***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).

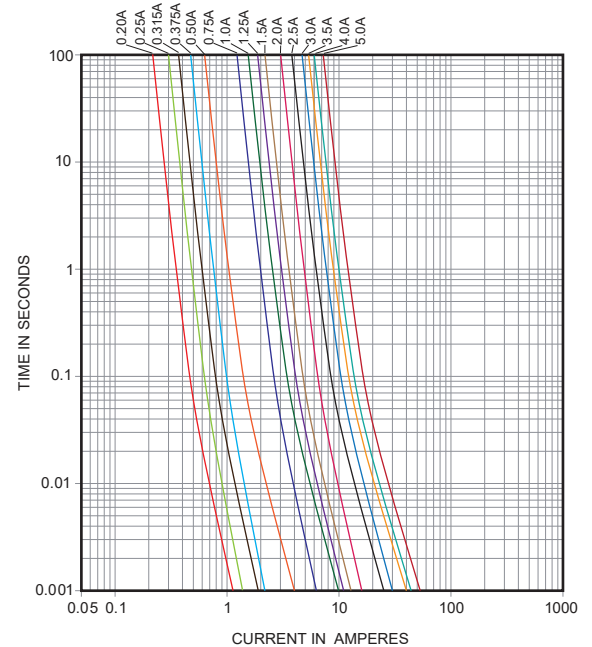
Environmental Characteristic

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

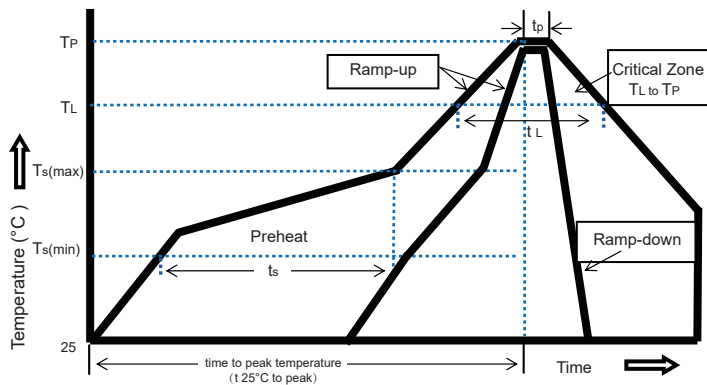
Temperature Derating Curve



Average Time-Current Curve



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_{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

Packing

No.	Quantity & Packaging Code
JFC0402TS	10000 fuses/reel (8mm tape-and-reel on a 7 inch (178mm) reel per EIA Standard 481)

Tape And Reel Specifications (mm)

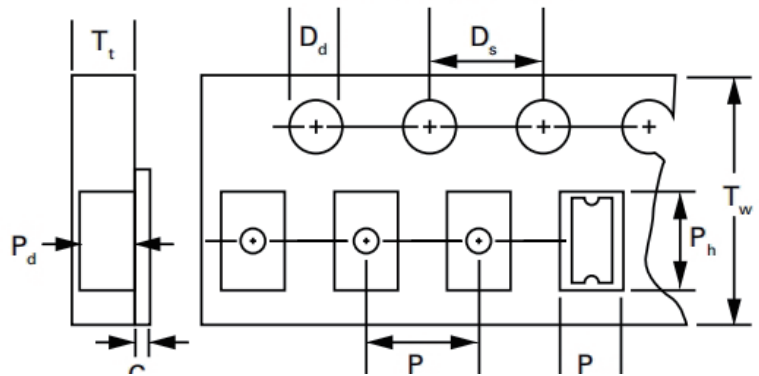
Tape Specifications

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

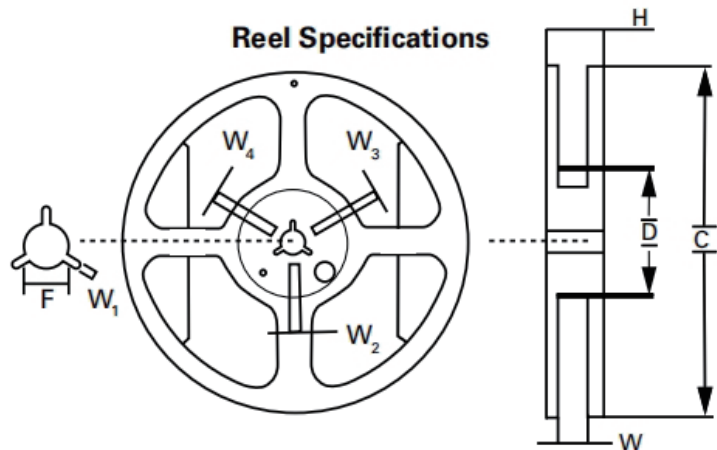
Reel Dimensions

H	12.0 ± 0.5
W	9.0 ± 0.5
D	$\phi 60 \pm 0.5$
F	$\phi 13.0 \pm 0.2$
C	$\phi 178 \pm 1$
W1	2.2 ± 0.5
W2	3.0 ± 0.5
W3	4.0 ± 0.5
W4	5.5 ± 0.5

Tape Specifications



Reel Specifications



Part Numbering System

JF C 0402 - xxxx F S

S=SMD

F=Time-Lag

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.