

# PRODUCT DATASHEET

Nano Fuses · Surface Mount

JFC0603FS FAST ACTING FUSE



# JFC0603FS FAST ACTING FUSE



### Agency Approvals

# AGENCYAGENCY FILE NUMBERE486200

#### Descriptions

JFC0603FS 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**

- Compatible with reflow and wave solder
- Excellent environmental integrity
- One time positive disconnect
- Lead Free and Halogen free material

#### **Electrical Characteristics**

Rated Current	1.0Ih	2.5Ih
250mA~8A	4 hour min	5 sec max

#### **Dimensions**

Drawing not to scale (Unit:mm/inch)



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#### **Performance Specification**

Part No.	Rated Voltage DC	Rated Current (A)	Breaking Capacity*	Typical Cold. Resistance (mΩ)**	Typical Voltage Drop (mV)	Typical Pre-Arcing I <sup>2</sup> t (A <sup>2</sup> Sec) <sup>***</sup>	Aplha Marking
JFC0603-0250FS		0.250		3250	893	0.00042	D
JFC0603-0375FS		0.375		1800	587	0.00093	Е
JFC0603-0500FS		0.500		1070	582	0.001	F
JFC0603-0750FS	63V 32V	0.750		470	427	0.009	G
JFC0603-1100FS		1		250	335	0.011	В
JFC0603-1150FS		1.5		150	270	0.045	Н
JFC0603-1200FS		2		78	160	0.115	K
JFC0603-1250FS		2.5	50A	49	145	0.14	L
JFC0603-1300FS		3		35	130	0.21	0
JFC0603-1350FS		3.5		28	130	0.50	R
JFC0603-1400FS	32V	4		18	120	0.56	S
JFC0603-1500FS		5		14	110	1.2	Т
JFC0603-1600FS		6		11	110	1.7	V
JFC0603-1700FS		7		9.5	80	2.3	Х
JFC0603-1800FS		8		7.0	75	3.0	Z

\* 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 25degrees

\*\*\*Typical Pre-arching I<sup>2</sup>t are measured at 10In Current

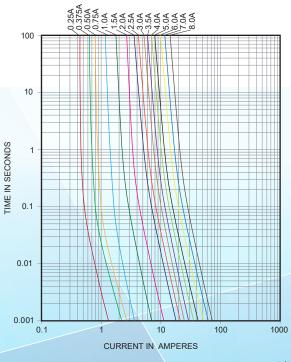
#### **Environmental Characteristic**

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

#### 1.3 1.2 PERCENT OF RATING 1.1 ï 1.0 0.9 25°C 0.8 0.7 0.6 0.5 -60°C -40°C -20°C 0°C 20°C 40°C 60°C 80°C 100°C 120°C 140°C AMBIENT TEMPERATURE

**Temperature Derating Curve** 

#### **Average Time-Current Curve**

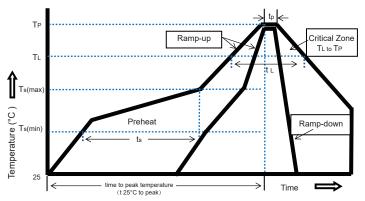


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#### **Recommended Soldering Parameters**



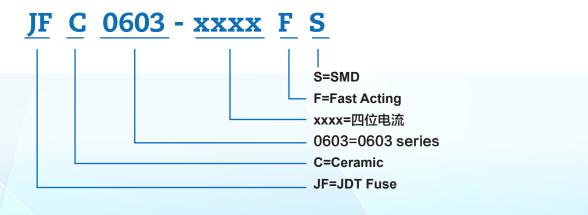
Soldering Method		Parameter	
Wave solder	Reservoir temperature 260°C		
Wave Soluel	Time in reservoir	10 Secs max	
Infrared reflow	Temperature	260°C	
	Time	30 Secs max	

Profile Feature		Lead(Pb) free solder	
	Temperature min (T <sub>smin</sub> )	150°C	
Preheat and soak	Temperature max (T <sub>smax</sub> )	200°C	
	Time (T <sub>smin</sub> to T <sub>smax</sub> )(ts)	60-120 Secs	
Average ramp up rate $Tsmax$ to $T_{P}$		3°C/Secs Max	
Liquidous temperature(T∟) Time at liquidous(t∟)		217°C 60-150 Secs	
Peak package body temperature (TP)		260°C	
Time (t⊵) 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	
JFC0603FS	5000 fuses/reel	
	8mm tape-and-reel on a 7 inch (178mm) reel per EIA Standard 481	

#### Part Numbering System



#### 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.

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