

PRODUCT DATASHEET

Nano Fuse · Surface Mount



JFC0603TS TIME-LAG FUSE



Descriptions

JFC0603TS 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.

Agency Approvals

| AGENCY | AGENCY FILE NUMBER | |
|--------|--------------------|--|
| | E486200 | |

Features

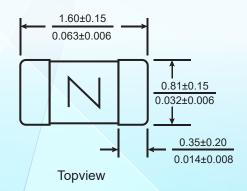
- High inrush current with standing capability
- · Compatible with reflow and wave solder
- · Ceramic and glass construction
- Excellent environmental integrity
- One time positive disconnect
- Lead Free and Halogen free material

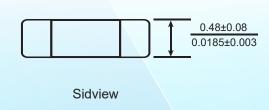
Electrical Characteristics

| 1.0Ih | 2.0Ih | 2.5Ih |
|------------|----------|------------|
| 4 hour min | 1~60 sec | 60 sec max |

Dimensions

Drawing not to scale (Unit:mm/inch)







JFC0603TS TIME-LAG FUSE

Performance Specification

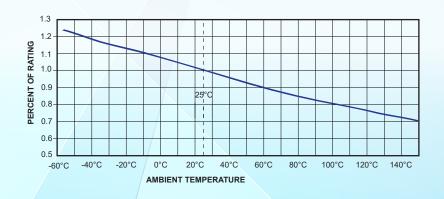
| Part No. | Rated Voltage DC | Rated Current (A) | Breaking Capacity* | Typical Cold. Resistance (mΩ)** | Typical Voltage Drop (mV) | Typical Pre-Arcing I ² t (A ² Sec)*** | Aplha Marking** |
|----------------|------------------------|------------------------------|-----------------------|---------------------------------------|---------------------------------|---|--------------------|
| JFC0603-0250TS | | 0.250 | | 3028 | 801 | 0.00046 | D |
| JFC0603-0375TS | | 0.375 0.500 0.750 1 | | 1730 | 526 | 0.00103 | Е |
| JFC0603-0500TS | | | | 968 | 521 | 0.0012 | F |
| JFC0603-0750TS | 63\/ | | | 431 | 387 | 0.0010 | G |
| JFC0603-1100TS | 32V | | | 233 | 302 | 0.0122 | В |
| JFC0603-1150TS | 32 V | 1.5 | | 138 | 243 | 0.0490 | Н |
| JFC0603-1200TS | | 2 | | 71 | 141 | 0.1260 | K |
| JFC0603-1250TS | | 2.5 | 50A | 43 | 132 | 0.151 | L |
| JFC0603-1300TS | | 3 | | 32 | 113 | 0.231 | 0 |
| JFC0603-1350TS | | 3.5 4 | 25 | 113 | 0.56 | R | |
| JFC0603-1400TS | | | | 16 | 108 | 0.63 | S |
| JFC0603-1500TS | 201/ | 5 | | 13 | 106 | 1.36 | Т |
| JFC0603-1600TS | 32 V | 32V 6 | | 9.7 | 106 | 1.87 | V |
| JFC0603-1700TS | | 7 | | 9.1 | 71 | 2.55 | Χ |
| JFC0603-1800TS | | 8 | | 6.3 | 66 | 3.43 | 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 I2t are measured at 10In Current
- ** For 1A-5A, the color of glass coating is Green; for others, it's Blue.

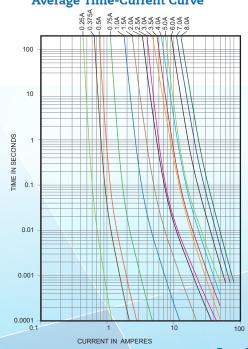
Environmental Characteristic

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

Temperature Derating Curve



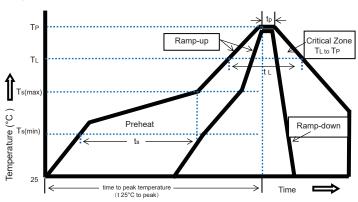
Average Time-Current Curve





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Recommended Soldering Parameters



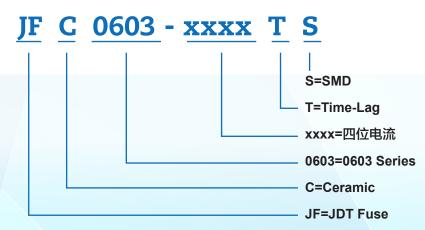
| Soldering Method | | Parameter |
|------------------|-----------------------|-------------|
| Wave solder | Reservoir temperature | 260°C |
| vvave soluei | Time in reservoir | 10 Secs max |
| Infrared reflow | Temperature | 260°C |
| | Time | 30 Secs max |

| Profile Feature | | Lead(Pb) free solder | |
|--|--|----------------------|--|
| | Temperature min (T _{smin}) | 150°C | |
| Preheat and soak | Temperature max (T _{smax}) | 200°C | |
| | Time (T _{smin} to T _{smax})(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 (TP) | | 260°C | |
| Time (t _P) 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 |
|-----------|---|
| JFC0603TS | 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.