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JDT FUSE
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PRODUCT DATASHEET

Surface Mount Fuse

JFC2410FS FAST ACTING FUSE

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Descriptions

JFC2410FS series are fast acting square Surface Mount fuses are ceramic tube/end cap constructions, RoHS compliant, Halogen Free and lead(Pb) exempts of the requirements of RoHS Directive(2002/95/EC), with U.S. (UL/CSA) safety agency approvals. Provide board level primary and secondary circuit protection in a wide variety of applications. With excellent inrush current withstanding capability, excellent reliability for thermal and mechanic shock, also have a high reliability and stable solder ability, end caps are available in gold/silver/nickel plated.

Agency Approvals

AGENCY	AGENCY FILE NUMBER
	E486200

Applications

- LED lighting
- Notebook PC
- Battery devices
- LCD/PDP devices
- LCD backlight in verter
- Portable Device
- Power supply
- Networking devices
- PC server
- Cooling fan system
- Storage system
- Telecom system
- Wireless base station
- White goods
- Game console
- Digital camera
- Office equipment
- Digital camera
- Automotive devices
- Medical equipment
- Industrial equipment

Features

- Fast acting
- RoHS compliant
- Conflict free metals
- Small size (6.1mm*2.5mm)
- Wide range of current rating available
- Wide operating temperature range
- Low temperature de-rating
- Tape and Reel for automatic placement

Electrical Characteristics

- Pre-Arcing Time / Current Characteristics:

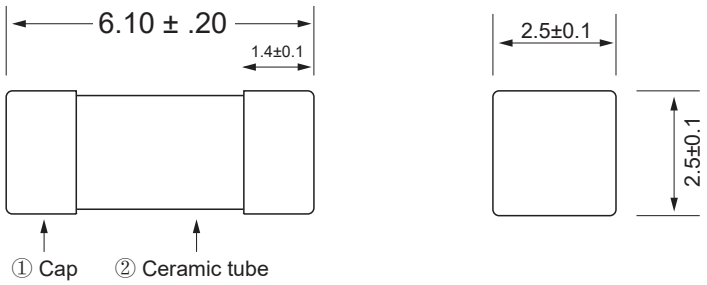
% of Ampere Rating(In)	Opening Time
100%*In	4 hours Min
200%*In	5 sec Max

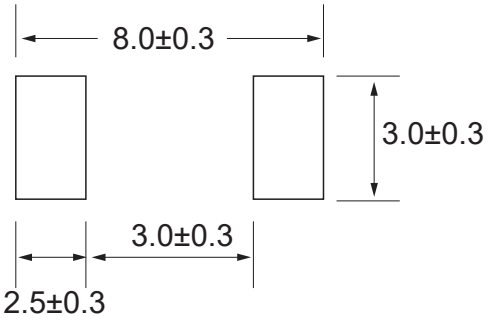
Performance Specification

Part Number	Rated Current (A)	Max Voltage Rating(V)	Interrupting Rating	Nominal Cold Resistance (mΩ)	Nominal Melting I^2t (A^2sec)
JFC2410-0062FS	0.062			5650	0.00034
JFC2410-0100FS	0.10			3140	0.040
JFC2410-0250FS	0.25			860	0.145
JFC2410-0500FS	0.50			320	0.275
JFC2410-0750FS	0.75			175	1.240
JFC2410-1100FS	1.00			148	3.500
JFC2410-1150FS	1.50			85	6.305
JFC2410-1200FS	2.00			44	8.950
JFC2410-1250FS	2.50			43	16.025
JFC2410-1300FS	3.00	250V	50A@250V	33	21.560
JFC2410-1315FS	3.15			29	22.750
JFC2410-1350FS	3.50			27	27.050
JFC2410-1400FS	4.00			25	31.808
JFC2410-1500FS	5.00			19	40.250
JFC2410-1600FS	6.00			18	67.245
JFC2410-1630FS	6.30			17	107.55
JFC2410-1700FS	7.00			15	132.78
JFC2410-1800FS	8.00			7.0	235.18
JFC2410-2100FS	10.0			7.0	270.50
JFC2410-2120FS	12.0	125V	100A@125V	7.0	331.52
JFC2410-2150FS	15.0			6.0	375.66
JFC2410-2200FS	20.0		500A@72V	2.3	410.00
JFC2410-2250FS	25.0	72V		1.7	550.00
JFC2410-2300FS	30.0			1.2	900.00

Dimensions and Structure

- Outline Drawing and dimensions (unit : mm)





Recommended pad layout

- Material Details:

NO.	Component	Material
①	Cap	Au Plated Brass Cap
②	Body	Non-Transparent Square Ceramic Tube
③	Fuse element	Cu-Ag Alloy wire

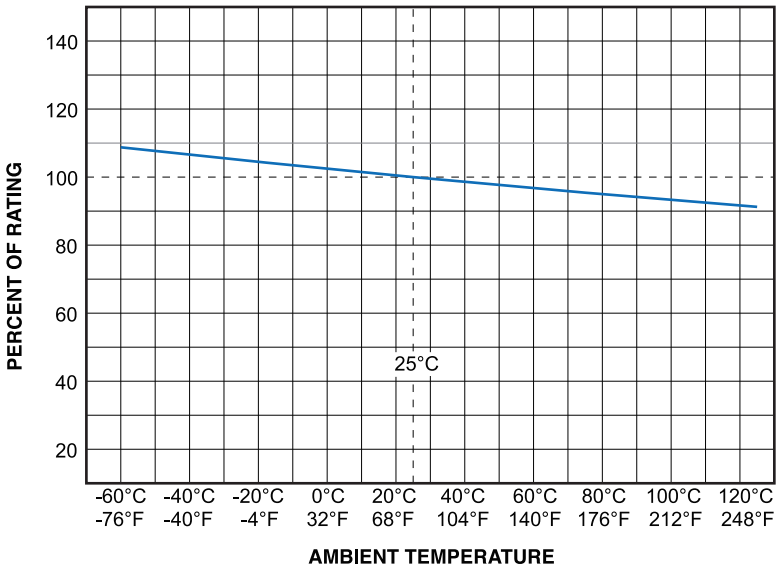
Product Characteristics

No.	Item	Contain	Reference standard
1	Insulation Resistance	10,000 ohms minimum	MIL-STD-202G, Method 302 Test ConditionA
2	Solderability	T=240°C±5°C, t=5+0/-0.5s, Cover⩾95%	MIL-STD-202G, Method 208H
3	Resistance to Soldering Heat	10 sec at 260°C	MIL-STD-202G, Method 210F Test Condition B
4	Thermal Shock	5 cycles, -65°C to +125°C, 15minutes @each extreme	MIL-STD-202G, Method 107G Test Condition B
5	Mechanical Shock	100G's peak for 6 milliseconds, 3 cycles	MIL-STD-202G, Method 213B Test 1
6	Vibration	0.03" amplitude, 10-55 Hz in 1 min. 2hrs each XYZ=6hrs	MIL-STD-202G, Method 201A
7	Moisture Resistance	10 cycles	MIL-STD-202G, Method 106G
8	Salt Spray	5% salt solution,48hrs	MIL-STD-202G, Method 101E Test Condition B
9	Operating Temperature	-55°C to +125°C	IEC60068-2-1/2

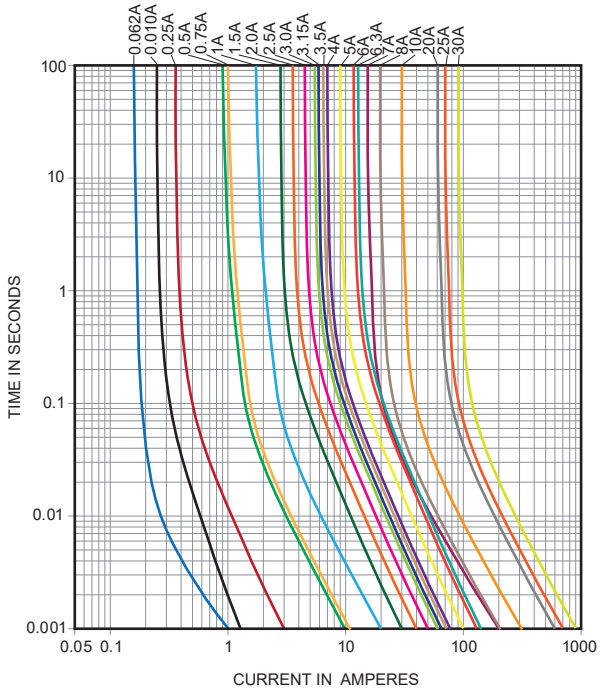
Environmental Characteristic

- Company operating temperature of the environment more than 25+/-5℃, in the selection of fuse specifications, it needs to consider the impact of the operating environment of the temperature fuse. Photo: temperature derating curve.

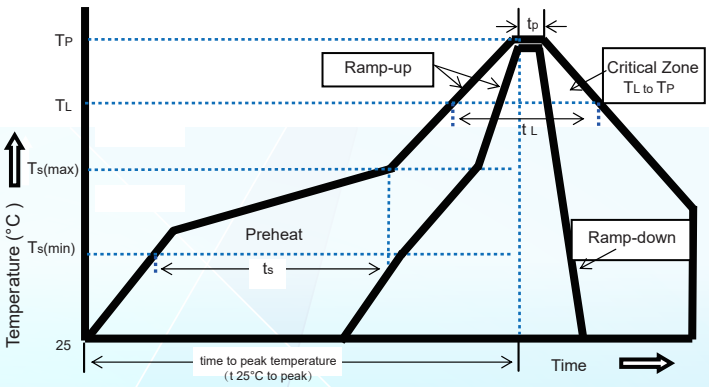
Temperature Rerating Curve



Average Time-Current Curve



Recommended Soldering Parameters

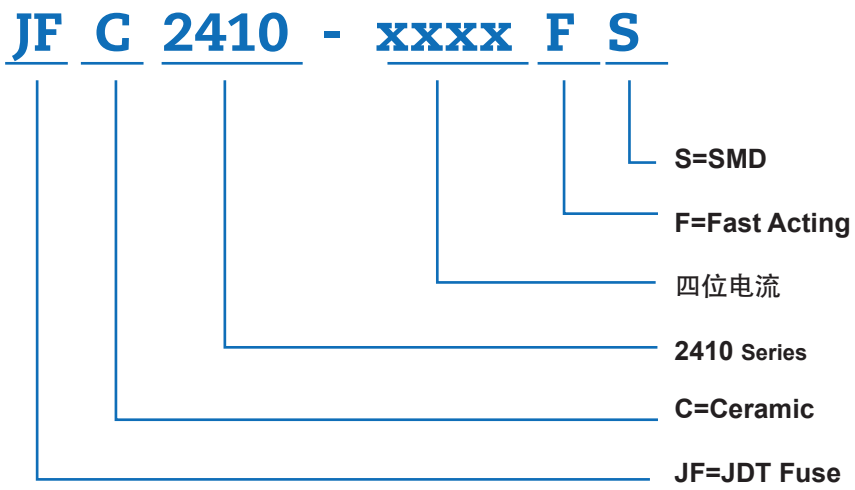


Reflow Condition		Pb-Free assembly
Average ramp-up rate(Ts(max)to Tp)		5°C/second max.
Preheat	Temperature Min (Ts(min))	150°C
	Temperature Max (Ts(max))	200°C
	Time (Min to Max)(ts)	60~120 seconds
Reflow	Temperature (T_L)	220°C
	Time Max (T_L)	60 seconds
Peak Temperature (Tp)		260°C max
Ramp-down Rate		5°C/second max
Time 25°C to peak Temperature(Tp)		8 minutes max

Packing

No.	Quantity &Packaging Code
JFC2410FS	1000 fuses/reel (12mm tape-and-reel on a 7 inch (178mm) reel per EIA Standard 481)

Part Numbering



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.