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PRODUCT DATASHEET

Surface Mount Fuse

0448 FAST ACTING FUSE



Descriptions

0448 series are fast acting square Surface Mount fuses, Ceramic tube/end cap constructions, For protecting instruments, power supply devices and telephone sets etc.

Features

- One time positive disconnect
- Fast acting for excessive current
- Ceramic double cap
- Low temperature derating
- Tape and Reel for automatic placement
- Wide range of current rating available
- Operating temperature:- 55 °C to +125 °C
- Conflict free metals
- RoHS, REACH compliant and Halogen-Free

Applications

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

Electrical Characteristics

Pre-Arcing Time / Current Characteristics:

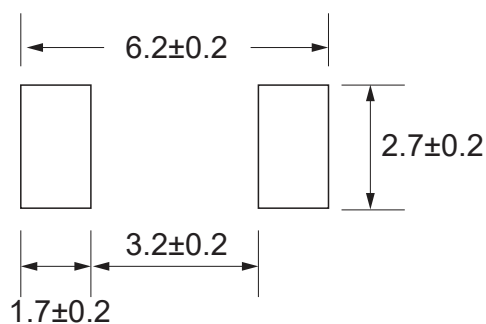
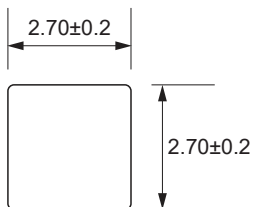
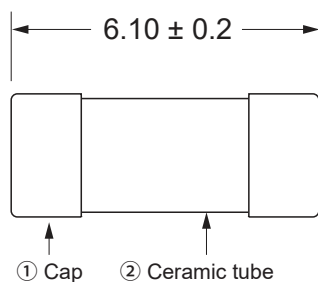
% of Ampere Rating(In)	Opening Time
125%*In	60 min Min
200%*In	1 min Max
1000%*In	10 ms ~100 ms

Performance Specification I

Part Number	Rated Current (A)	Voltage Rating(V)	Interrupting Rating	Max Voltage Drop(mV)	I ² t Melting Integral (A ² sec)
0448.250JF	0.25	250	50A@250Vac 100A@125Vac	240	0.269
0448.315JF	0.315			220	0.344
0448.500JF	0.50			284	0.680
0448.630JF	0.63			175	0.911
0448.800JF	0.80			160	1.769
0448001.JF	1.00			170	2.022
04481.25JF	1.25			130	2.159
044801.6JF	1.60			120	5.376
0448002.JF	2.00			127	8.064
044802.5JF	2.50			100	14.112
04483.15JF	3.15			81	24.864
0448004.JF	4.00			100	32.928
0448005.JF	5.00			88	45.696
044806.3JF	6.30			100	78.624
0448007.JF	7.00			100	78.624
0448008.JF	8.00	125	100A@125Vac	100	99.456
0448010.JF	10.0			95	202.944
0448012.JF	12.0			90	242.277
044812.5JF	12.5			85	250.583
0448015.JF	15.0			85	322.056
0448020.JF	20.0	72	500A@72Vac	85	322.056
0448025.JF	25.0			140	2730.0
0448030.JF	30.0			180	6426.0

Dimensions and Structure

- Outline Drawing and dimensions (unit : mm)



Recommended pad layout

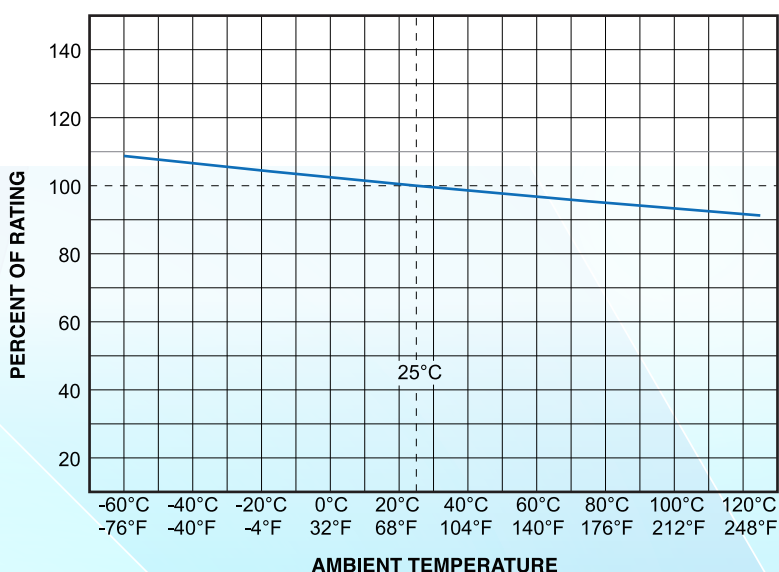
- Material Details:

Component	Material
End caps	Ag- plated copper
Body	Non-Transparent Square Ceramic Tube
Fuse element	Alloy
Solder	Solder wire(Sn 99.3% Cu 0.7%)

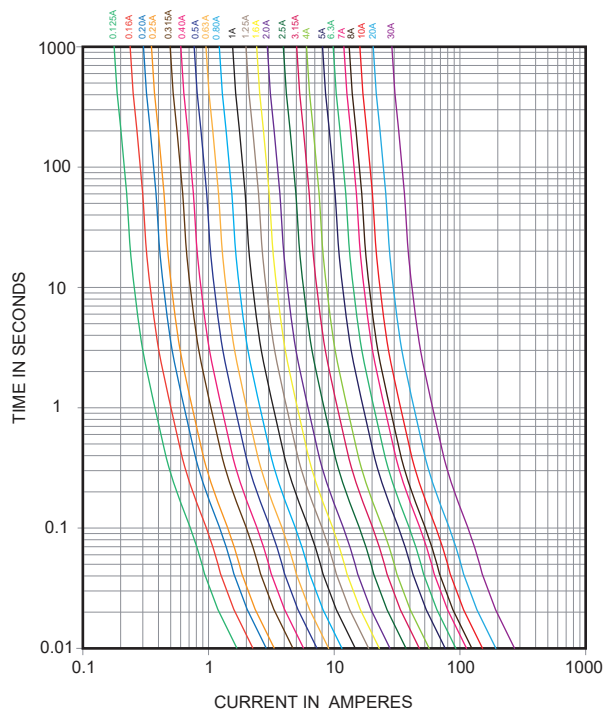
Environmental Characteristic

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

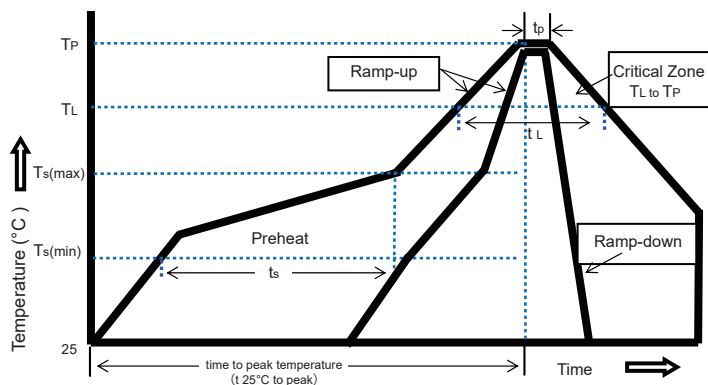
Temperature Derating Curve



Average Time-Current Curve



Recommended Soldering Parameters



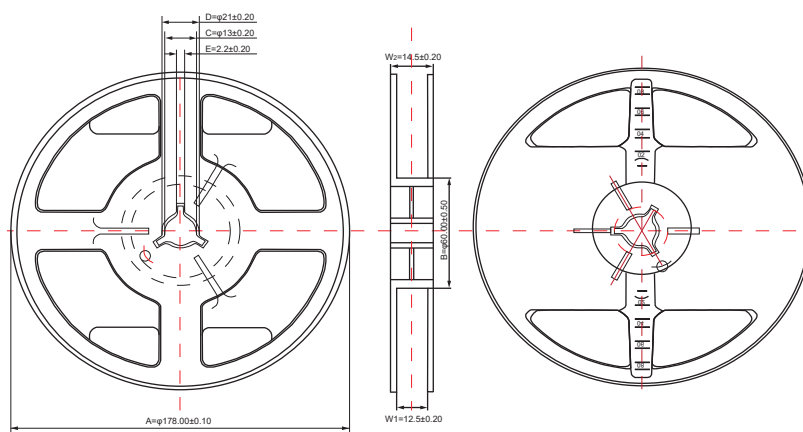
Reflow Condition		Pb-Free assembly
Average ramp-up rate (Ts(max) to Tp)	Temperature Min (Ts(min))	150°C
	Temperature Max (Ts(max))	200°C
	Time (Min to Max)(ts)	60~120 seconds
Reflow	Temperature (TL)	220°C
	Time Max (tL)	60 seconds
Peak Temperature (Tp)		260°C max
Ramp-down Rate		5°C/second max
Time 25°C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

Soldering Method	Parameter
Wave solder	260°C, 5 s max
Hand-Solder	360°C, 1 s max

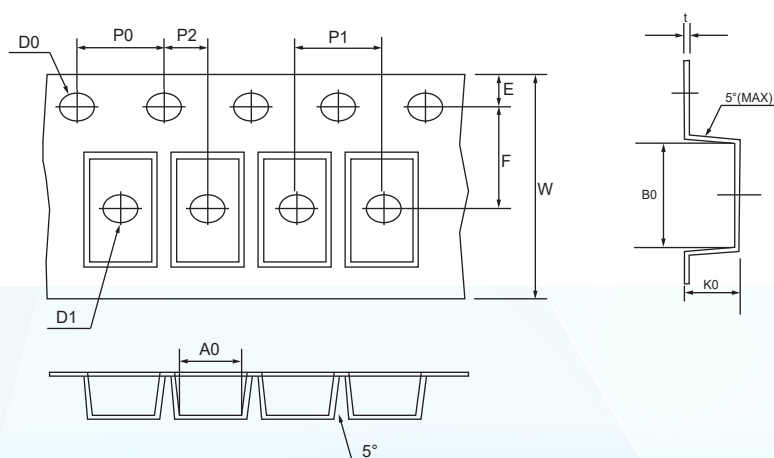
Storage conditions	operating Temperature
Temperature	5°C~35°C
Humidity	25%~85%
Storage time	6 months
- 40 °C to +85 °C	

Packing

No.	Quantity &Packaging Code
0448	1500 fuses/reel (12mm tape-and-reel on a 7 inch (178mm) reel per EIA Standard 481)

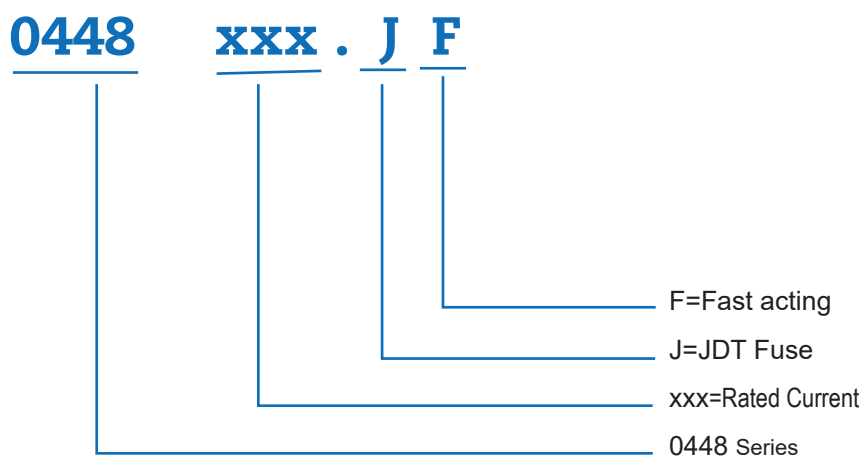


Item	A	B	C	D	E	W1	W2
Spec.(mm)	178 ± 0.10	60 ± 0.50	13 ± 0.20	21 ± 0.20	2.2 ± 0.20	12.5 ± 0.20	14.5 ± 0.20



Item	A0	B0	D0	D1	E	F
Spec.(mm)	2.70 ± 0.10	6.4 ± 0.10	1.5 ± 0.10	1.50 ± 0.25	1.75 ± 0.10	5.50 ± 0.10
Item	K0	P0	P1	P2	W	t
Spec.(mm)	2.70 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.0 ± 0.10	12.00 ± 0.15	0.25 ± 0.05

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.