

### Description

1206FA Series are the fuses set the industry standard for performance, reliability and quality. The solder-free design provides excellent on-off and temperature cycling characteristics during use and also makes our SMD fuses more heat and shock tolerant than typical subminiature fuses.



### Electrical Characteristics

Rated Current	% of Amp Rating	Opening Time
250mA-30A	100%	4 Hours, min
250mA-5A	250%	5 Seconds, max
6A-30A	350%	5 Seconds, max

#### Soldering Method

- Wave Solder Immersion: 260°C, 10 seconds maximum.
- Solder Reflow: 260°C, 30 seconds maximum.

### Applications

- Flat panel displays and televisions
- Automotive infotainment and ECU
- Computer servers
- Portable electronics
- Mobile device chargers

### Features

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



### Specification

Part No.	Rated Voltage DC	Rated Current	Breaking Capacity	Typical Cold Resistance (mOhms)	Typical Voltage Drop (mV)	Typical Pre-Arcing I <sup>2</sup> t (A <sup>2</sup> Sec)	Alpha Marking
1206FA-R250	63/72V	250mA	50A	3595	1407	0.0004	.25
1206FA-R375	63/72V	375mA	50A	1863	718	0.0008	E
1206FA-R500	63/72V	500mA	50A	1031	650	0.0022	0.5
1206FA-R750	63/72V	750mA	50A	599	616	0.0057	.75
1206FA-1A	63/72V	1A	50A	492	510	0.10	H
1206FA-1.25A	63/72V	1.25A	50A	161	184	0.021	▲
1206FA-1.5A	63/72V	1.5A	50A	247	367	0.15	K
1206FA-2A	63/72V	2A	50A	151	316	0.41	N
1206FA-2.5A	63/72V	2.5A	50A	89	240	0.65	O
1206FA-3A	63/72V	3A	50A	51	187	1.39	P
1206FA-3.5A	63/72V	3.5A	50A	39	180	1.68	R
1206FA-4A	63/72V	4A	50A	37	173	1.73	S
1206FA-4.5A	32/45V	4.5A	50A	25	164	2.62	X
1206FA-5A	32/45V	5A	50A	19	141	2.89	T
1206FA-6.5A	32/45V	6.5A	50A	18	140	3.4	6.5
1206FA-7A	32/45V	7A	50A	11	140	5.68	7
1206FA-10A	24V	10A	300A	4.8	59	2.16	10
1206FA-12A	24V	12A	300A	3.9	67	7.11	12
1206FA-15A	24V	15A	300A	2.6	66	23.89	15
1206FA-20A	24V	20A	300A	1.7	60	47.17	20
1206FA-25A	24V	25A	300A	1.5	57	32	25
1206FA-30A	24V	30A	300A	1.1	68	43	30

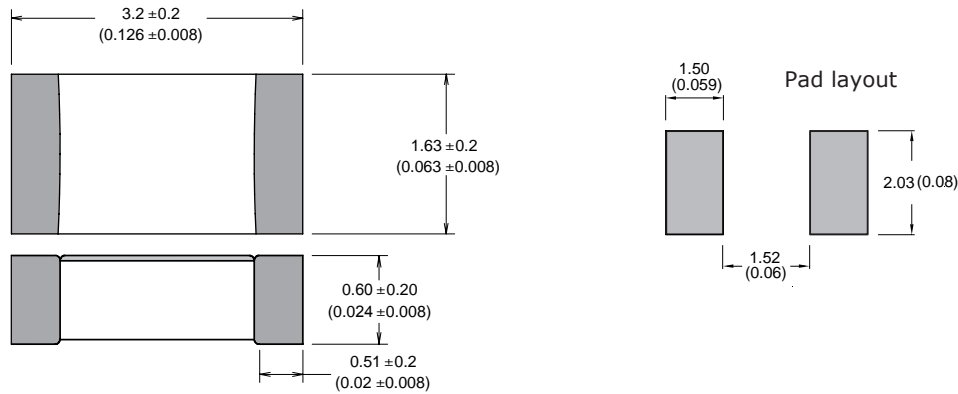
\*Typical Melting I t measured at 10In Current.

\*Typical Voltage Drop measured at rated current after temperature has stabilized.

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

## Dimension

(Unit: mm/inch)

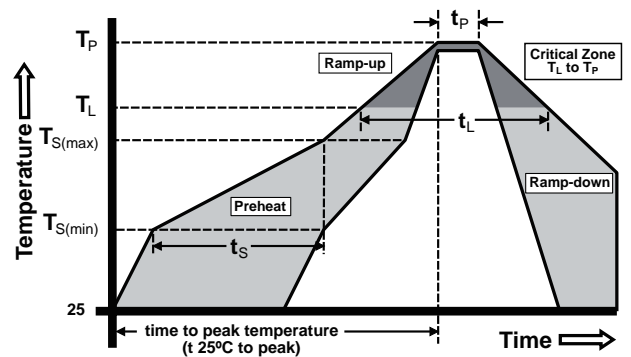


Packaging: 3,000 pieces of fuses in paper taper and reeled on a 178mm (7 inch) reel

## Product Charateris

<b>Materials</b>	<b>Body:</b> Advanced High Temperature Substrate <b>Terminations:</b> 100% Tin over Nickel over Copper <b>Element Cover Coat:</b> Conformal Coating
<b>Operating Temperature</b>	-55 C to 125 C Consult temperature rerating curve chart.
<b>Thermal Shock</b>	Withstands 5 cycles of -55 C to 125 C
<b>Humidity</b>	MIL-STD-202F, Method 103B, Condition D
<b>Vibration</b>	Per MIL-STD-202F, Method 201A
<b>Insulation Resistance (After Opening)</b>	Greater than 10,000 ohms
<b>Resistance to Soldering Heat</b>	MIL-STD-202G, Method 210F, Condition D

## Temperature



## Soldering Parameters

Reflow Condition		Pb – free assembly
Pre Heat	- Temperature Min ( $T_{s(min)}$ )	150°C
	- Temperature Max ( $T_{s(max)}$ )	200°C
	- Time (Min to Max) ( $t_s$ )	60 – 180 seconds
Average Ramp-up Rate (Liquidus Temp (TL) to peak)		5°C/second max.
TS(max) to TL - Ramp-up Rate		5°C/second max.
Reflow	- Temperature (T <sub>L</sub> ) (Liquidus)	217°C
	- Temperature (t <sub>L</sub> )	60 – 150 seconds
Peak Temperature (T <sub>P</sub> )		260+0/-5°C
Time within 5°C of actual peak Temperature (t <sub>P</sub> )		20 – 40 seconds
Ramp-down Rate		5 °C/second max.
Time 25°C to peak Temperature (TP)		8 minutes max.
Do not exceed		260°C

Time Current Curves

