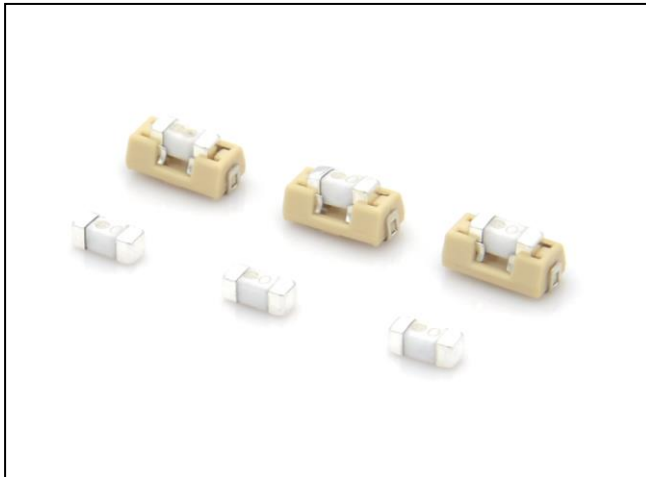


# Type 24F

## 6125 Fast-Acting SMD Fuses



### Description

24F 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.

### Features

- Rapid interruption of excessive current
- Compatible with reflow and wave solder
- One time positive disconnect
- Lead Free and Halogen free material

### Agency Approvals.

Safety Agency	Agency File Number	Ampere Range Volt@I.R.ABILITY
	E485357	100mA~20A 100A@250V AC 100mA~11A 50A@350V AC 100mA~20A 100A@125VAC/DC 12A~20A 500A@72VDC 12A~20A 500A@63VDC 12A~20A 500A@32VDC 12A~20A 500A@24VDC

### Electrical Characteristics for Series

Rating Current	100% of Ampere Rating	200% of Ampere Rating
100mA~20A	4 Hour, Min.	5Sec., Max.

### Electrical Characteristic Specifications by Item

Part No.	Rated Current	Rated Voltage	Breaking Capacity (A)	Melting Integral 10ln min(A <sup>2</sup> S)	Alpha Mark	Typical Voltage Drop (mV)	Approvals cURus
24F0250	250mA	350VAC 250VAC 125VAC 125VDC	50A@350V AC 100A@250V AC 100A@125V AC 100A@125V DC	0.025	A	1400	•
24F0315	315mA			0.039	C	1300	•
24F0500	500mA			0.100	D	900	•
24F0630	630mA			0.158	F	800	•
24F0800	800mA			0.256	J	600	•
24F1100	1A			0.400	H	500	•
24F1125	1.25A			0.625	I	400	•
24F1160	1.6A			1.024	N	300	•
24F1200	2A			1.600	O	300	•
24F1250	2.5A			2.500	P	300	•
24F1315	3.15A			3.969	R	300	•
24F1400	4A			6.400	U	300	•
24F1500	5A			10.000	V	300	•
24F1630	6.3A			15.876	W	300	•
24F1800	8A			25.600	Z	220	•
24F2100	10A			40.000	Y	220	•
24F2150	15A	250VAC 72VDC	50A@250V AC 500A@72V DC	90.000	15	220	•
24F2200	20A			250.00	20	220	•

\* 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 25 degrees

# Type 24F

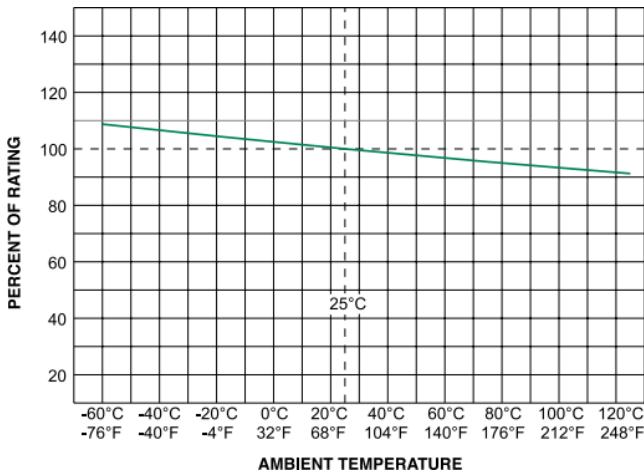
## 6125 Fast-Acting SMD Fuses



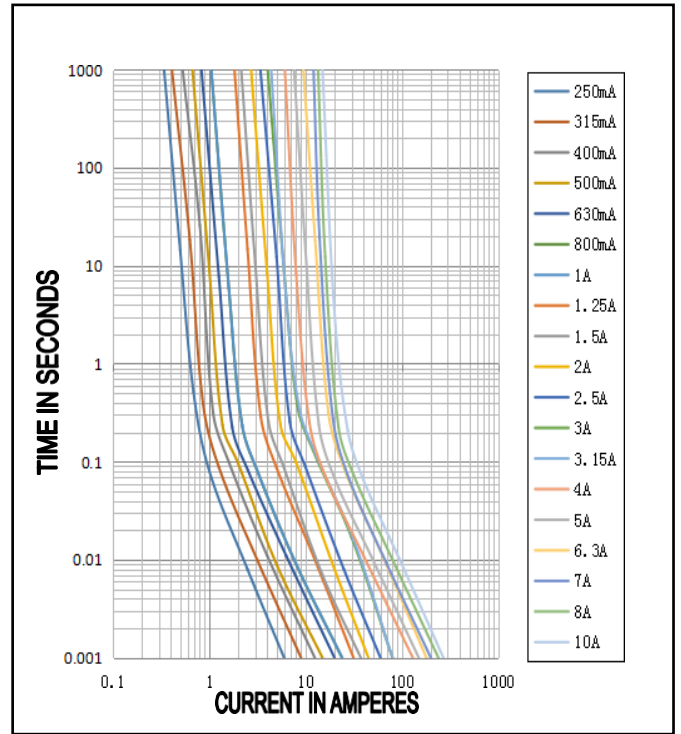
### Temperature Re-rating Curve

\* Normal ambient temperature:  $23 \pm 3^\circ\text{C}$

\* Operating temperature:  $-55 \sim +125^\circ\text{C}$ , with proper correction factor applied

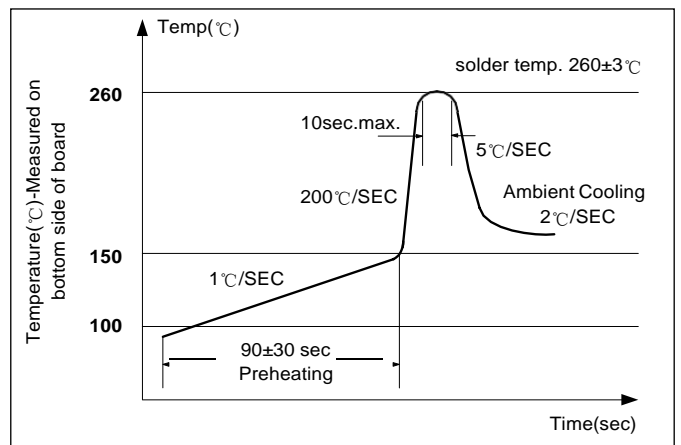


### Average Time Current Curves



### 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 secs
Average ramp up rate (Liquidus Temp( $T_L$ ) to peak)		5°C/second max
Ts(max) to $T_L$ Ramp-up rate		5°C/second max
Reflow	-Temperature( $T_L$ )(liquidus)	217°C
	-Temperature( $t_L$ )	60-150 seconds
Time within 5°C of actual peak Temperature( $t_p$ )		20-40 seconds
Ramp-down Rate		5°C/second max
Time 25°C to peak Temperature ( $T_p$ )		8 minutes Max.
Do not exceed		260°C



# Type 24F

## 6125 Fast-Acting SMD Fuses

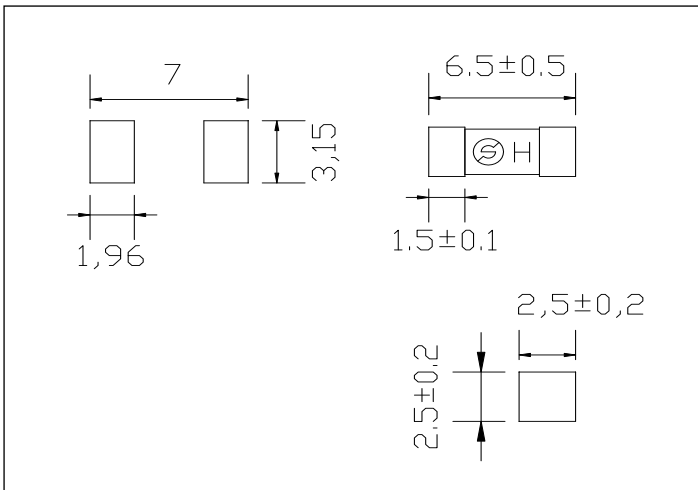


### Product Characteristics

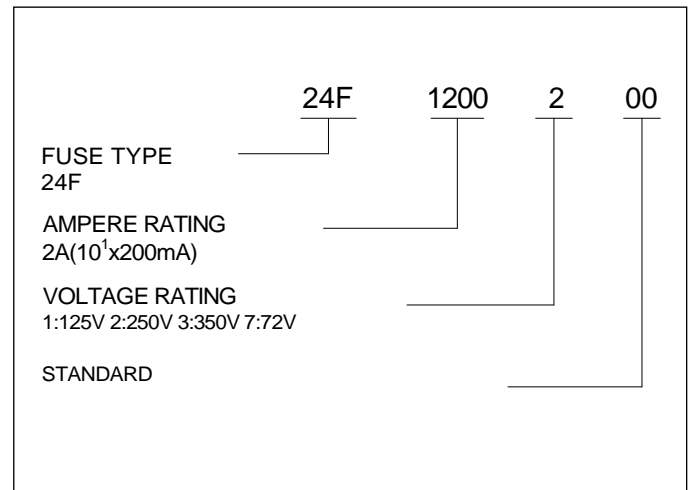
<b>Materials</b>	<b>Body:</b> Ceramic <b>Terminations:</b> Gold-plated Caps
<b>Product Marking</b>	Brand, Amperage Rating
<b>Operating Temperature</b>	-55°C to 125°C
<b>Moisture Sensitivity Level</b>	Level 1, J-STD-020
<b>Solderability</b>	MIL-STD-202, Method 208
<b>Insulation Resistance (after Opening)</b>	MIL-STD-202, Method 302, Test Condition A (10,000 ohms minimum)

<b>Thermal Shock</b>	MIL-STD-202, Method 107, Test Condition B, 5 cycles, -65°C to 125°C, 15 minutes @ each extreme
<b>Mechanical Shock</b>	MIL-STD-202, Method 213, Test I: Deenergized. 100G's pk amplitude, sawtooth wave 6ms duration, 3 cycles XYZ+xyz = 18 shocks
<b>Vibration</b>	MIL-STD-202, Method 201: 0.03" amplitude, 10-55 Hz in 1 min. 2hrs each XYZ=6hrs
<b>Moisture Resistance</b>	MIL-STD-202, Method 106, 10 cycles
<b>Salt Spray</b>	MIL-STD-202, Method 101, Test Condition B (48hrs)
<b>Resistance to Soldering Heat</b>	MIL-STD-202, Method 210, Test condition B (10 sec at 260°C)

### Mechanical Dimensions (Unit:mm)



### Ordering Information



### Packaging

Packaging Option	Packaging Specification	Quantity
24F	tape-and-reel	1000PCS