

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-11A 250V AC@100A 100mA-11A 350V AC@50A 100mA-11A 125VAC/DC@100A

Electrical Characteristics for Series

Rating Current	100% of Ampere Rating	200% of Ampere Rating Max.
100mA~11A	4 Hour, Min	10sec.

Electrical Characteristic Specifications by Item

Part No	Rated Voltage	Rated Current(A)	Breaking Capacity (A)	Melting Integral 10In min(A2S)	Alpha Mark	Typical Voltage Drop (mV)	Approvals
							cURus
24F0250	350VAC 250VAC 125VAC 125VDC	250mA	50A@350VAC 100A @250VAC 100A@125V AC 100A @125VDC	0.0986	A	1400	•
24F0315		315mA		0.1633	C	1300	•
24F0500		500mA		0.4175	D	900	•
24F0630		630mA		0.8800	F	800	•
24F0800		800mA		1.1520	J	600	•
24F1100		1A		1.5150	H	500	•
24F1125		1.25A		2.9980	I	400	•
24F1160		1.6A		3.8000	N	300	•
24F1200		2A		6.4000	O	300	•
24F1250		2.5A		7.9500	P	300	•
24F1315		3.15A		28.360	R	300	•
24F1400		4A		30.990	U	300	•
24F1500		5A		54.010	V	300	•
24F1630		6.3A		94.890	W	300	•
24F1800		8A		174.96	Z	220	•
24F2100		10A		290.01	Y	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

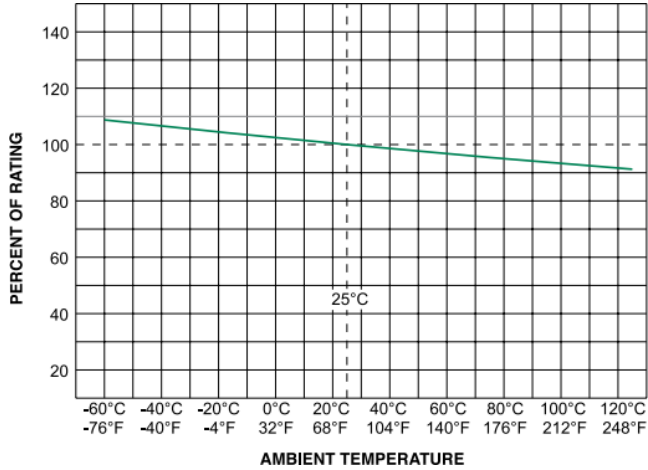
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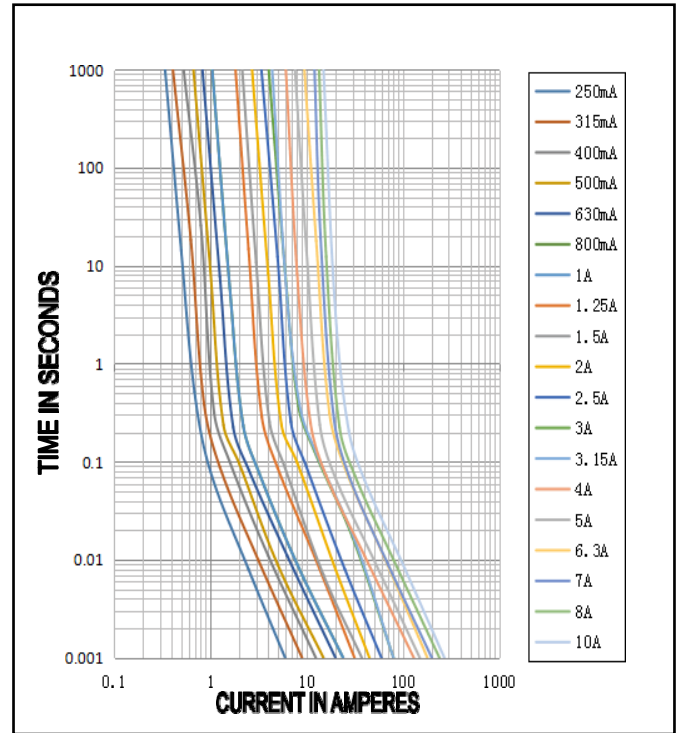


Temperature Re-rating Curve

- * Normal ambient temperature: $23 \pm 3^\circ\text{C}$
- * Operating temperature: $-55 \sim +125^\circ\text{C}$, with proper correction factor applied

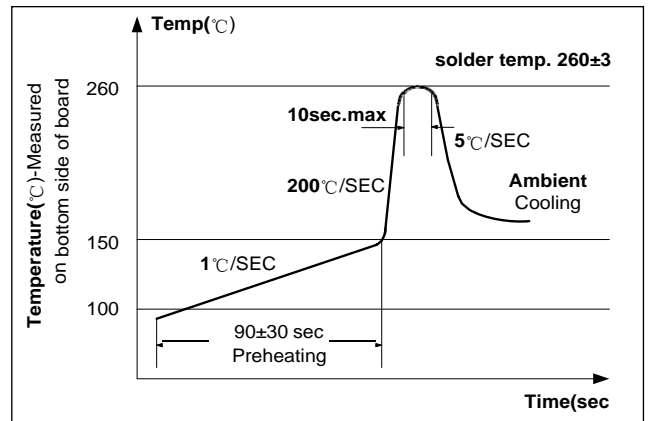


Average Time Current Curves



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



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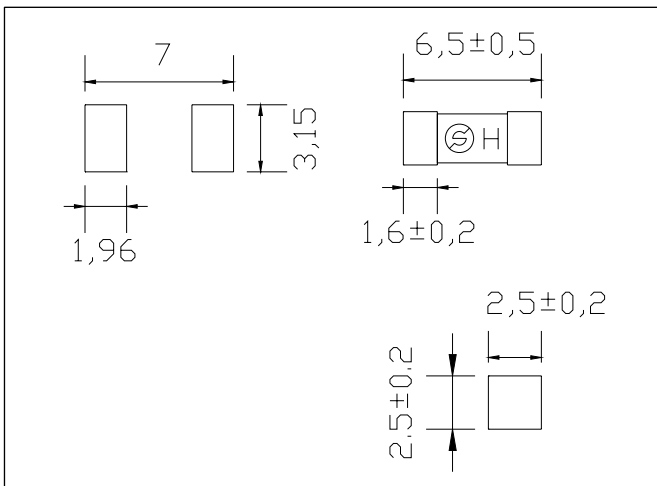


Product Characteristics

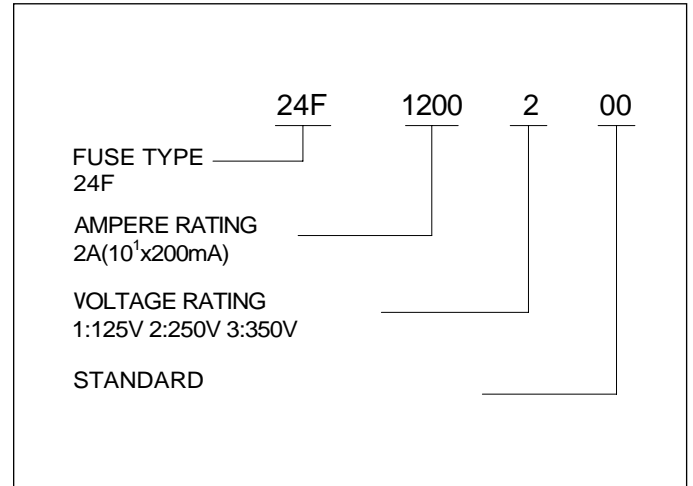
Materials	Body: Ceramic Terminations: Gold-plated Caps
Product Marking	Brand, Amperage Rating
Operating Temperature	-55°C to 125°C
Moisture Sensitivity Level	Level 1, J-STD-020
Solderability	MIL-STD-202, Method 208
Insulation Resistance (after Opening)	MIL-STD-202, Method 302, Test Condition A (10,000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

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