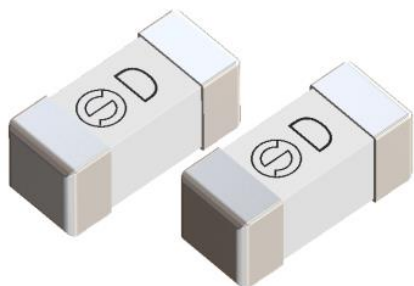


Type 24F

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 sub-miniature 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

Catalog Number	Rated Current	Rated Voltage	Rated Voltage	Breaking Capacity 1	Normal Melting I ² T(A ² sec) ³	Normal Cold Resistance(ohms) ²	Alpha Mark	Approvals cULus
24F0050	50mA	250VAC 125VAC	250VDC 125VDC	50A@250VAC 50A@250VDC 50A@125VAC 50A@125VDC	0.0000375	8.12	50mA	•
24F0062	62mA				0.0000288	6.72	62mA	•
24F0080	80mA				0.0002080	4.68	80mA	•
24F0100	100mA				0.0007250	2.58	100mA	•
24F0125	125mA				0.0009375	1.82	125mA	•
24F0160	160mA				0.0014720	1.56	160mA	•
24F0200	200mA				0.0023000	0.86	200mA	•
24F0250	250mA	350VAC 250VAC 125VAC	125VDC	50A@350VAC 100A@250VAC 100A@125VAC 100A@125VDC	0.025	0.47	⊗A	•
24F0315	315mA				0.039	0.235	⊗C	•
24F0400	400mA				0.080	0.267	⊗G	•
24F0500	500mA				0.100	0.155	⊗D	•
24F0630	630mA				0.158	0.202	⊗F	•
24F0750	750mA				0.281	0.164	⊗M	•
24F0800	800mA				0.256	0.140	⊗J	•
24F1100	1A				0.400	0.092	⊗H	•
24F1125	1.25A				0.625	0.076	⊗I	•
24F1160	1.6A				1.024	0.082	⊗N	•
24F1200	2A				1.600	0.046	⊗O	•
24F1250	2.5A				2.500	0.043	⊗P	•
24F1300	3A				3.18	0.027	⊗R	•
24F1315	3.15A				3.18	0.027	⊗R	•
24F1400	4A				3.70	0.019	⊗U	•

Type 24F

6125 Fast-Acting SMD Fuses



Catalog Number	Rated Current	Rated Voltage	Rated Voltage	Breaking Capacity 1	Nominal Melting $I^2T(A^2sec)^3$	Nominal Cold Resistance(ohms) ²	Alpha Mark	Approvals cURus
24F1500	5A	350VAC 250VAC 125VAC	125VDC	50A@350VAC 100A@250VAC 100A@125VAC 100A@125VDC	5.70	0.021	⊖V	•
24F1630	6.3A				8.96	0.11	⊖W	•
24F1700	7A				9.50	0.0075	⊖7	•
24F1800	8A				14.60	0.0075	⊖Z	•
24F2100	10A				28.00	0.0049	⊖Y	•
24F2120	12A	250VAC 125VAC	125VDC 72VDC	50A@250VAC 100A@125VAC 100A@125VDC 500A@72VDC	38.00	0.0045	⊖12	•
24F2150	15A				94.50	0.0031	⊖15	•
24F2200	20A				130.0	0.0025	⊖20	•

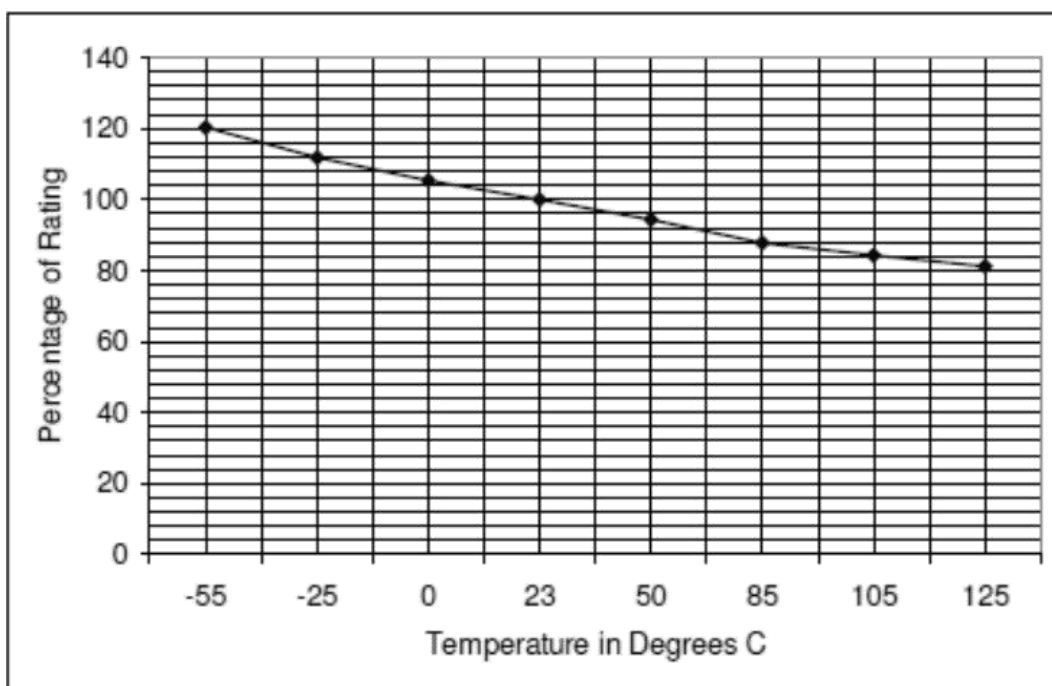
* DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)

* DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25 degrees

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

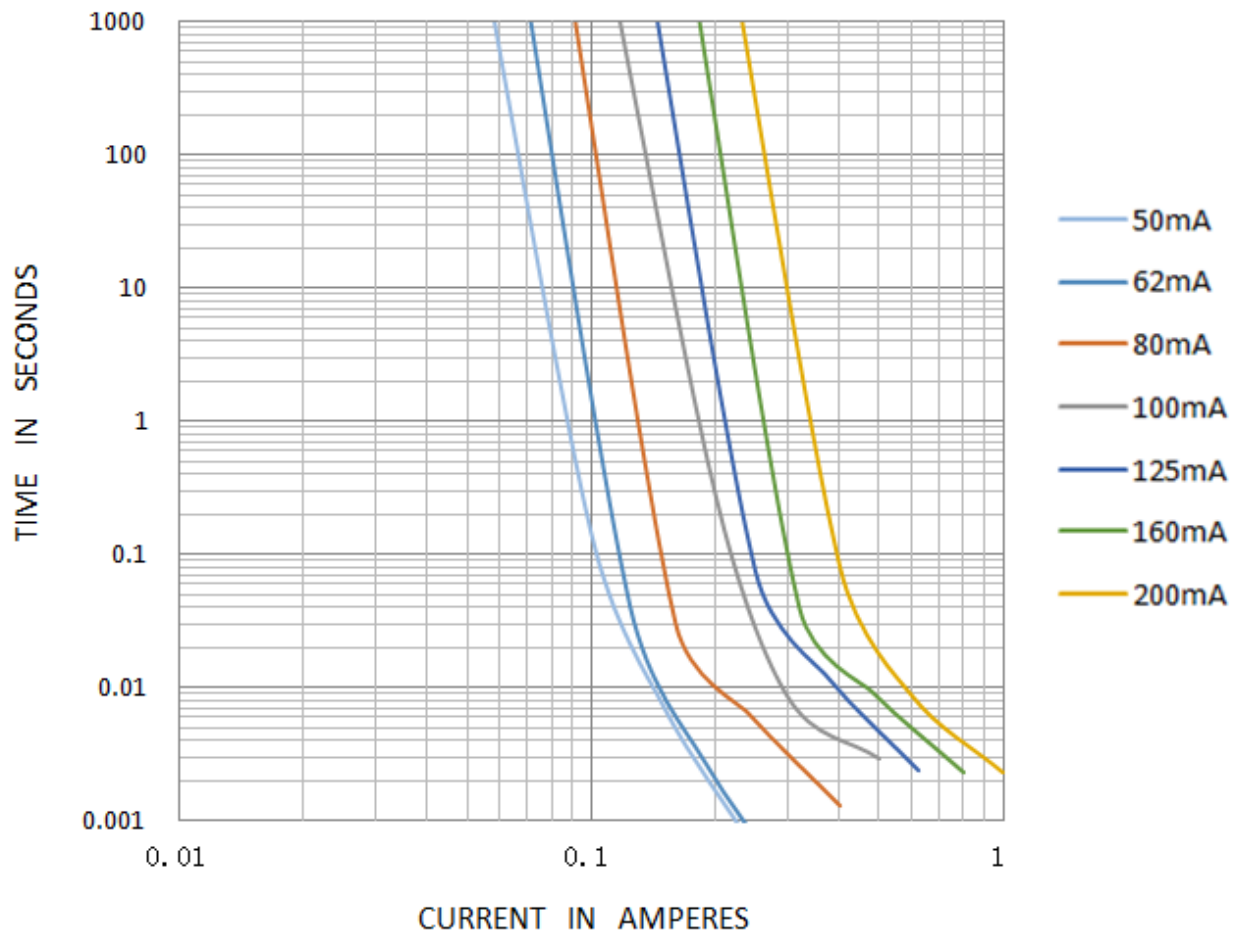


Type 24F

6125 Fast-Acting SMD Fuses

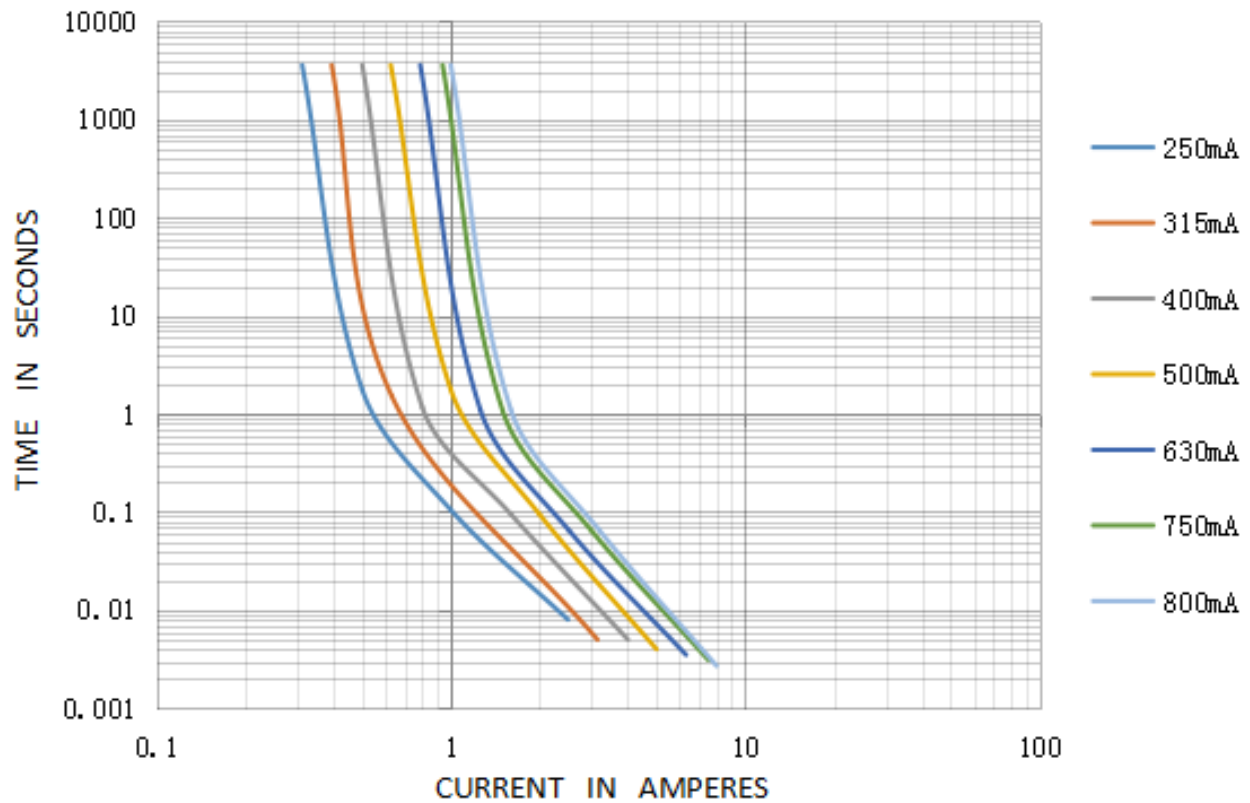


Average Time Current Curves(I-T Characteristics 25°C typical)



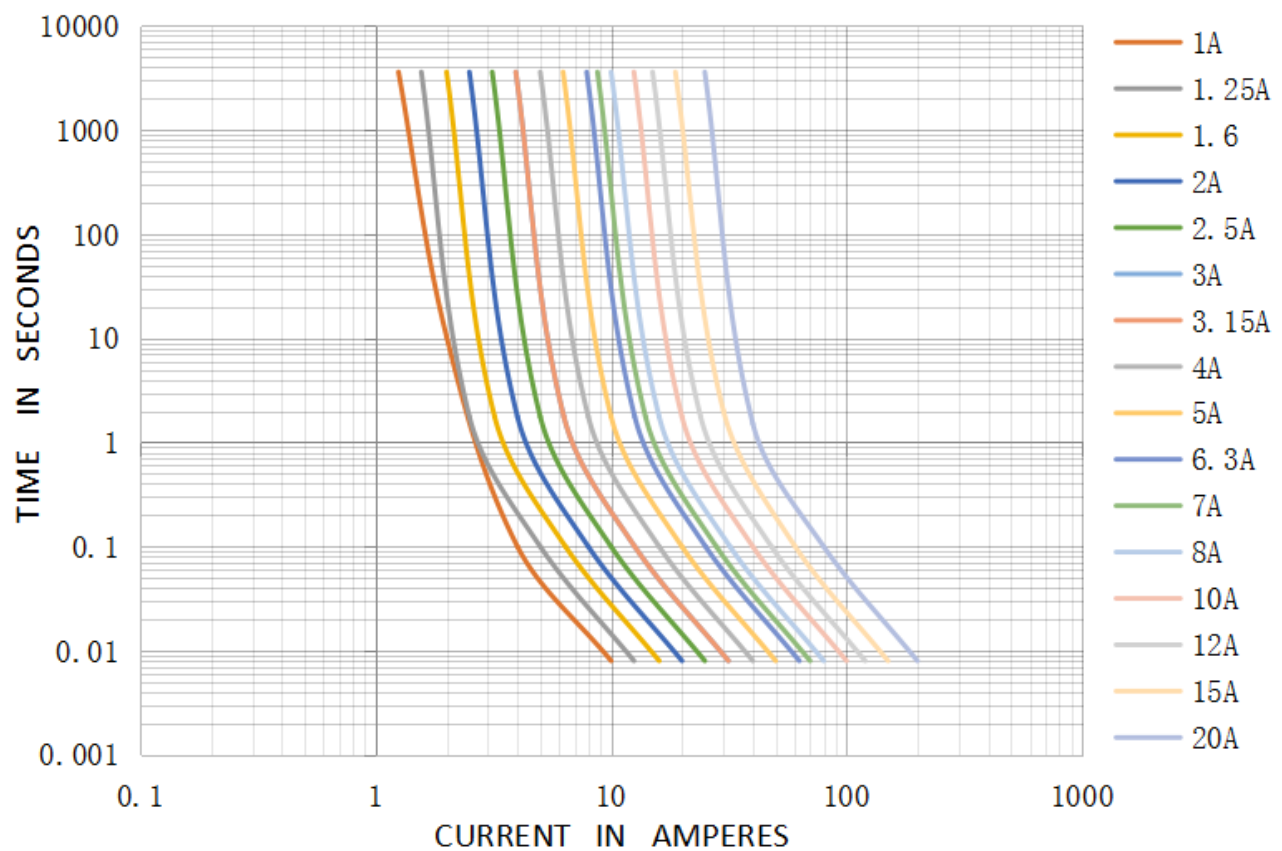
Type 24F

6125 Fast-Acting SMD Fuses



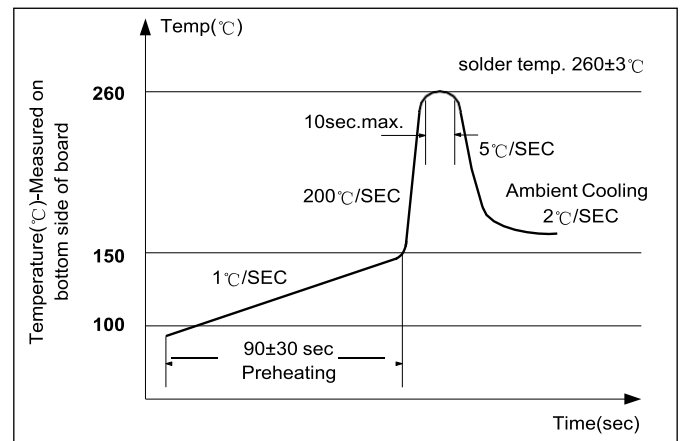
Type 24F

6125 Fast-Acting SMD Fuses



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
$T_{s(max)}$ 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

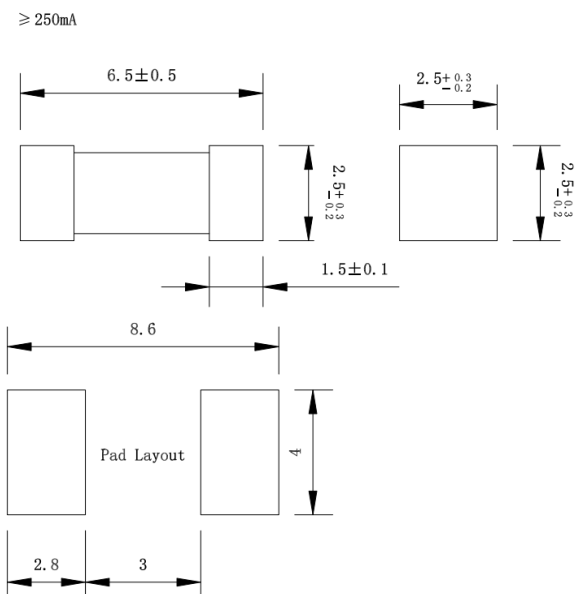
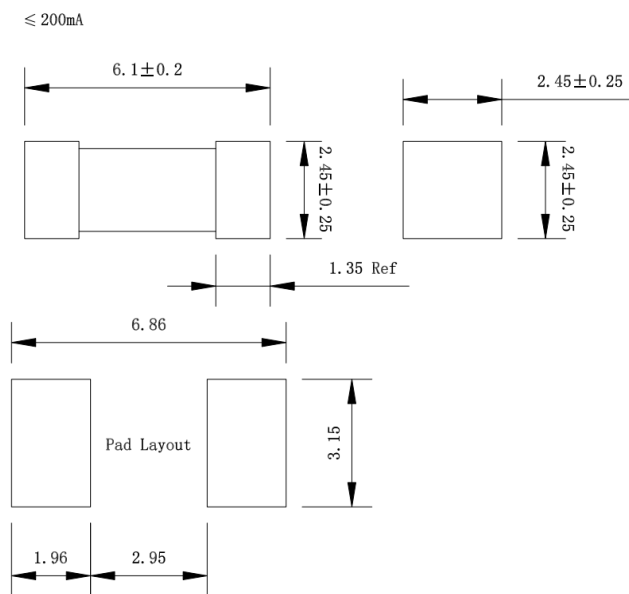


Product Characteristics

Materials	Body: Ceramic Terminations: Silver-plated Caps
Soldering Parameters	260°C ≤ 10 sec. (Wave Soldering) 350°C ≤ 3 sec. (Hand Soldering)
Soldering Peak (Wave Soldering)	260°C ≤ 10 sec. 350°C ≤ 5 sec.

Operating Temperature	-55°C to +125°C (consider de-rating)
Stock Condition	+10°C to +60°C Relative humidity ≤ 75% yearly Average, without dew, maximum Value for 30 days-95%
Vibration Resistance	24 cycles at 15 min. each (60068-6) 10-60Hz at 0.75mm amplitude 60-2000Hz at 10g acceleration

Mechanical Dimensions (Unit:mm)



Part Number System

24F	2100	1	00
Fuse Type	Ampere Rating (10 ² × 100mA = 10A)	3:350Vac 2:250Vac 1:125Vac/dc	Standards and specifications

Packaging

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