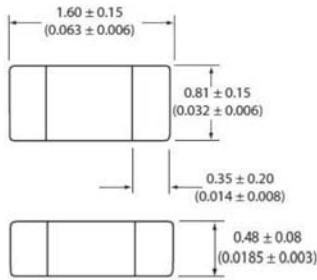


Type 06F

0603 Fast Acting SMD Fuses



Description

06F 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

- AEC-Q200 Automotive Grade Certified
- Compatible with reflow and wave solder
- Excellent environmental integrity
- One time positive disconnect
- Lead Free and Halogen free material

Applications

- Power supplies
- Battery Chargers
- Consumer Electronicsii
- Industrial Controllers

Electrical Characteristics for Series

% of Ampere Rating	Opening Time
100%	4 Hour, Min
200%	60Sec.,Max

Agency Approvals.

Safety Agency	Agency File Number	Ampere Range Volt@I.R.ABILITY
	E485357	250mA-8A 32Vdc @50A

Electrical Characteristic Specifications by Item

Part No	Rated Voltage DC	Rated Current (A)	Breaking Capacity (A) 1	Typical Cold Resistance (mOhms) 2	Typical Voltage Drop (mV)	Typical Pre-Arcing I ² t (A ² Sec) 3	Alpha Mark
06F0250	32V	0.250	50A	3250	893	0.00042	D
06F0375		0.375	50A	1310	587	0.00093	E
06F0500		0.500	50A	1070	582	0.001	F
06F0750		0.750	50A	470	427	0.009	G
06F1100		1	50A	300	345	0.011	B
06F1150		1.5	50A	150	270	0.045	H
06F1200		2	50A	72	160	0.115	K
06F1250		2.5	50A	52	145	0.14	L
06F1300		3	50A	35	130	0.21	O
06F1350		3.5	50A	23.8	130	0.5	R
06F1400		4	50A	21	120	0.56	S
06F1500		5	50A	14	110	1.2	T
06F1600		6	50A	8.5	110	1.7	V
06F1700		7	50A	7.3	80	2.3	X
06F1800		8	50A	5.1	75	3.0	Z

* 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 25degrees

* Typical Pre-arching I²t are measured at 10In Current

** For 1A-5A, the color of glass coating is Green; for others, it's Blue.

Type 06F

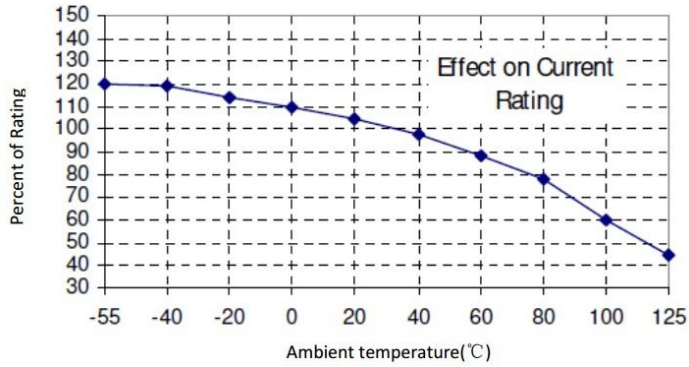
0603 Fast Acting SMD Fuses



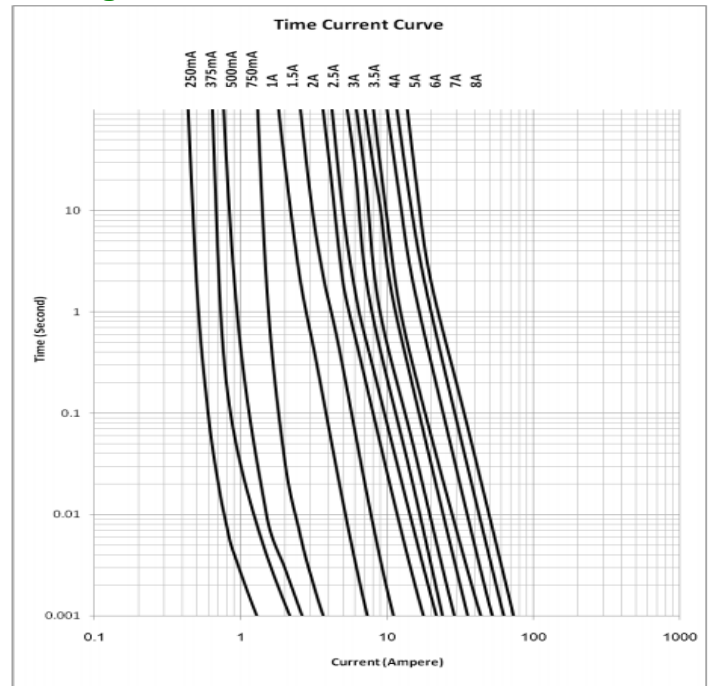
Temperature Re-rating Curve

* 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 Method

Wave solder

Reservoir temperature: 260°C

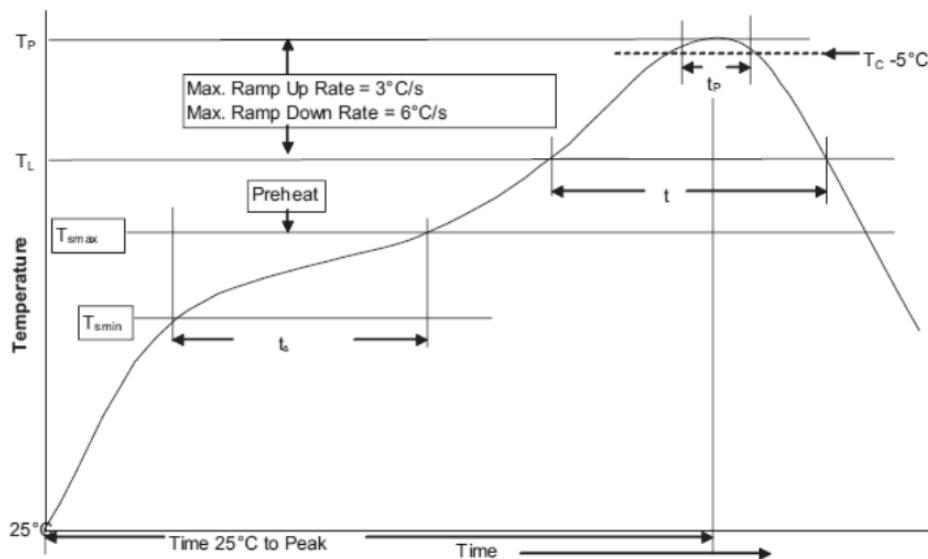
Time in reservoir: 10 seconds maximum

Infrared reflow

Temperature: 260°C

Time: 30 seconds maximum

Solder Reflow Profile



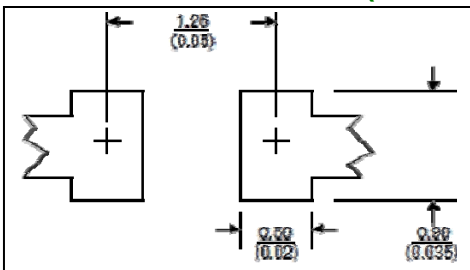
Type 06F

0603 Fast Acting SMD Fuses

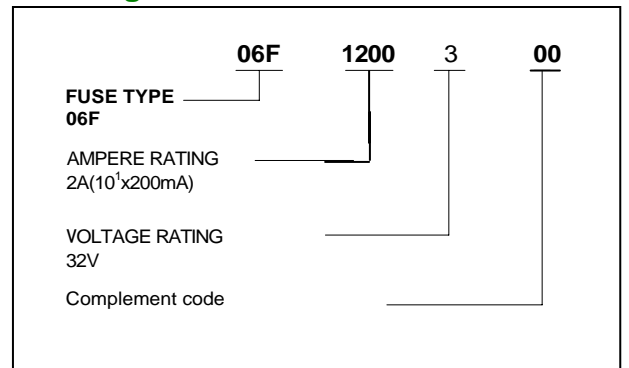


Profile Feature	Lead(Pb)free solder	
Preheat and soak	Temperature min.(T _{smin})	150°C
	Temperature max.(T _{smax})	200°C
	Time(T _{smin} to T _{smax})(ts)	60 - 120 Seconds
Average ramp up rate T _{smax} to T _p	3°C / Second Max.	
Liquidous temperature(T _L)	217°C	
Time at liquidous(t _L)	60 – 150 Seconds	
Peak package body temperature(T _p)	260°C	
Time(T _p)within 5°C of the specified classification temperature(T _c)	30 Seconds	
Average ramp-down rate(T _p to T _{smax})	6°C / Second Max.	
Time(25°C to Peak Temperature)	8 Minutes Max.	

Mechanical Dimensions(Unit:mm)



Ordering Information



Packaging

Packaging Option	Packaging Specification	Quantity
06F	tape-and-reel	5000