



产品规格书

PRODUCT SPECIFICATION

客户名称: CUSTOMER:	
产品名称: PRODUCT NAME:	贴片保险丝
产品描述: Product description:	0603 贴片保险丝 快断 编带
型号/规格: Model/specification:	0603F 1A32V
料号: PN:	
日期: Date:	2025 年 03 月 03 日

供应商-泓达 Supplier-Hongda		确认合格章 Confirm qualified Signet	客 户 Customer	零件承认章 Approval Signet
编 制 PREPARED	李 红			
审 核 CHECKED	鲜 春			
批 准 APPROVED	孙嘉利			



0603 Fast Acting SMD Fuses

0603F Series



Description

0603F 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	1.0In	2.0In
250mA~8A	4 hour minimum	60 sec maximum

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

Specifications

Specification								
Part No.	Rated Voltage		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
	DC							
0603F250mA	63V	32V	0.250	50A	3250	893	0.00042	D
0603F375 mA			0.375	50A	1800	587	0.00093	E
0603F500 mA			0.500	50A	1070	582	0.001	F
0603F750 mA			0.750	50A	470	427	0.009	G
0603F1A			1	50A	250	335	0.0095	B
0603F1.5A			1.5	50A	150	270	0.04	H
0603F2A			2	50A	78	160	0.11	K
0603F2.5A			2.5	50A	49	145	0.135	L
0603F3A			3	50A	35	130	0.21	O
0603F3.5A			3.5	50A	28	130	0.45	R
0603F4A			4	50A	18	120	0.56	S
0603F5A			5	50A	14	110	1.2	T
0603F6A			6	50A	11	110	1.7	V**
0603F7A			7	50A	9.5	80	2.3	X**
0603F8A			8	50A	7.0	75	3.0	Z**

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

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

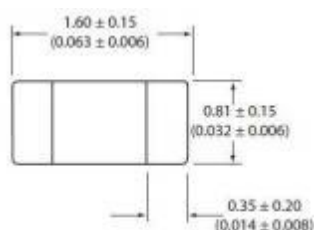
3. Typical Pre-arcing I²t are measured at 10In Current

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

Specifications are subject to change without notice. Application testing is strongly recommended.

Dimension

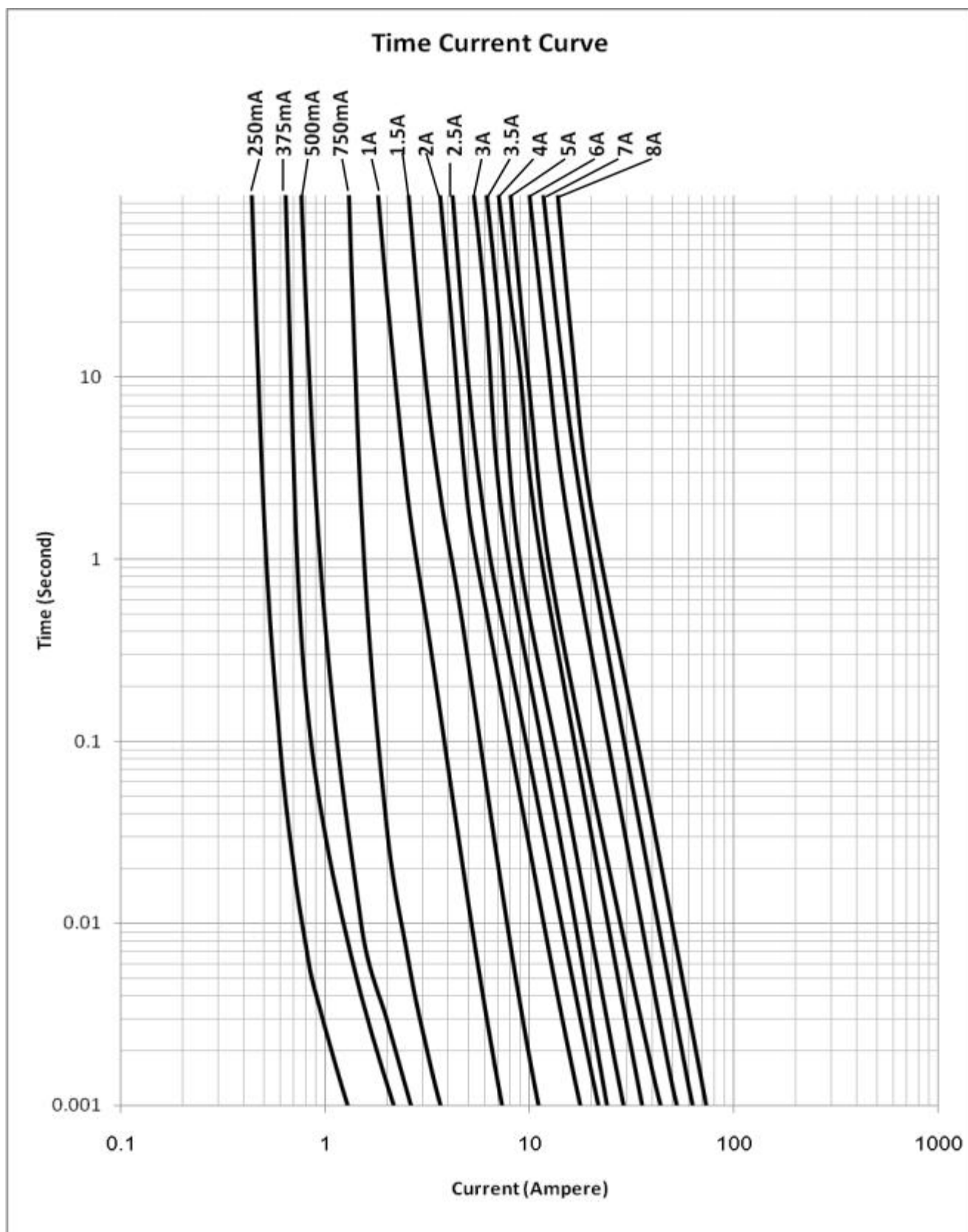
Drawing not to scale (Unit:mm/inch)





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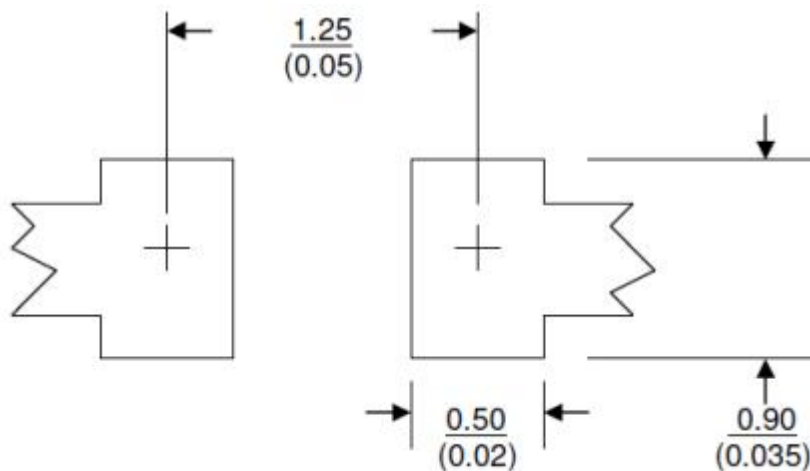


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Recommended land pattern



Unit: mm/inches

Product characteristics

Operating temperature	-40 °C to +85 °C , with proper derating factor applied
Storage temperature	-40 °C to +85 °C
Load humidity	MIL-STD-202G, Method 103B (1000 hr @ +85 °C / 85% RH & 10% rated current)
Moisture resistance	MIL-STD-202, Method 106E (50 cycles)
Thermal shock	MIL-STD-202, Method 107D (-65 °C to +125 °C, 100 cycles)
Vibration test	MIL-STD-202, Method 204D, Test Condition D (10-2,000 Hz)
Mechanical shock resistance	MIL-STD-202, Method 213B (3000 G / 0.3 ms)
Salt spray resistance	MIL-STD-202, Method 101, Test Condition B (48 hour exposure)
Insulation resistance	The insulation resistance after breaking capacity test is higher than 0.1MΩ when measured by 2X rated voltage
Solderability	J-STD-002C Method B1 (Dip and Look Test), Method G1 (Wetting Balance Test), Method D (Resistance to Dissolution / Dewetting of Metalization)
Resistance to soldering heat	MIL-STD-202, Method 210F (Solder dip +260 °C, 60 seconds / Solder Iron +350 °C, 3-5 seconds)
High temperature life test	MIL-STD-202G, Method 108A (1000 Hours @ +70 °C & 60% rated current)
Resistance to solvents	MIL-STD-202, Method 215K

Soldering method

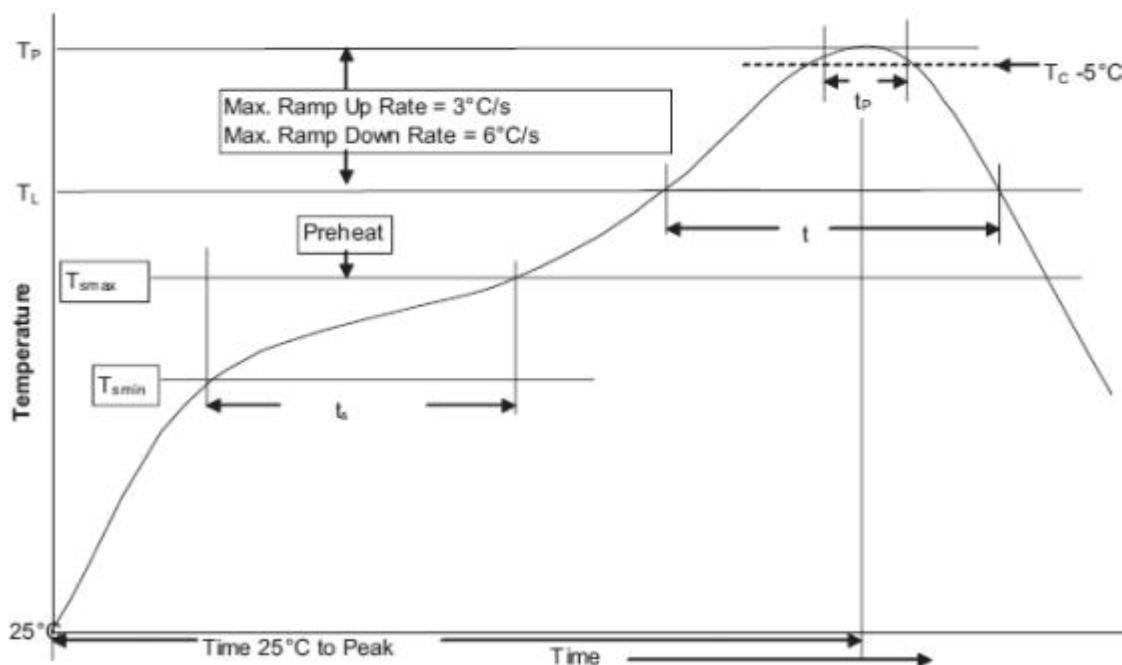
- Wave solder
 - Reservoir temperature: 260°C
 - Time in reservoir: 10 seconds maximum
- Infrared reflow
 - Temperature: 260°C
 - Time: 30 seconds maximum

Solder reflow profile



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Profile Feature		Lead(Pb) free solder
Preheat and soak	• Temperature min.(T _{smmin})	150°C
	• Temperature max. (T _{smmax})	200°C
	• Time (T _{smmin} to T _{smmax}) (t _s)	60 - 120 Seconds



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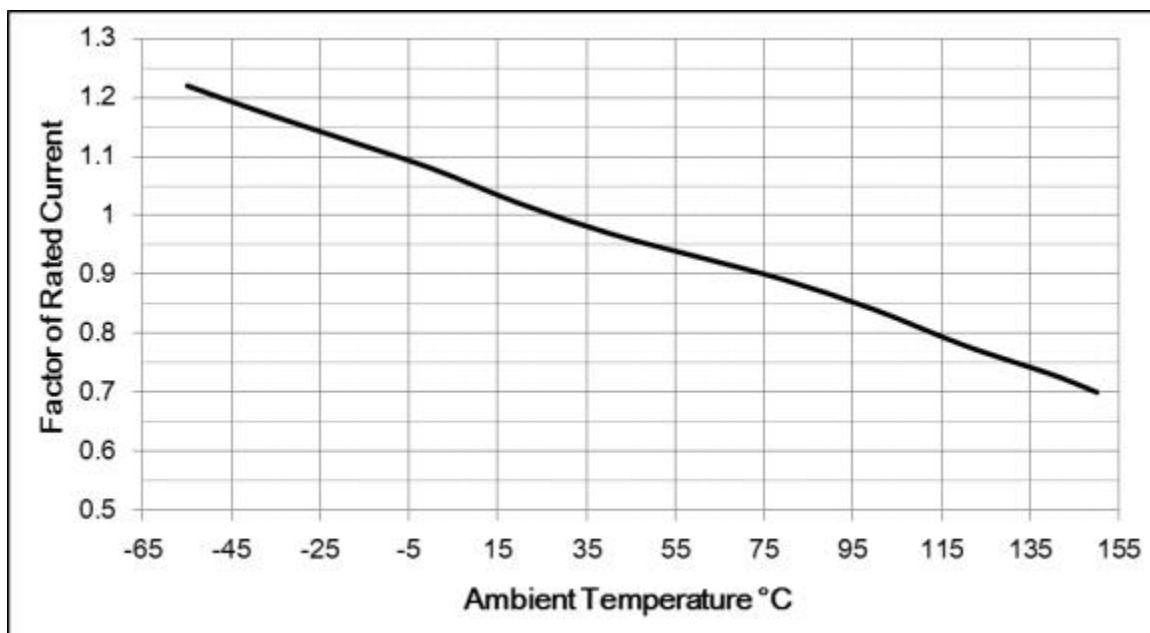


Average ramp up rate T_{smax} to T_P	3°C / Second Max.
Liquidous temperature (T_L)	217°C
Time at liquidous (t_L)	60 - 150 Seconds
Peak package body temperature (T_P)	260°C
Time (t_P) within 5°C of the specified classification temperature (T_C)	30 Seconds
Average ramp-down rate (T_P to T_{smax})	6°C / Second Max.
Time (25°C to Peak Temperature)	8 Minutes Max.

Temperature Derating Curve

Normal ambient temperature: 23+/-3°C

Operating temperature: -55 ~ 150°C, with proper correction factor applied



Package

5000 fuses on 8mm tape-and-reel on a 7 inch (178mm) reel per EIA Standard 481.

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