



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 4A32V
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**

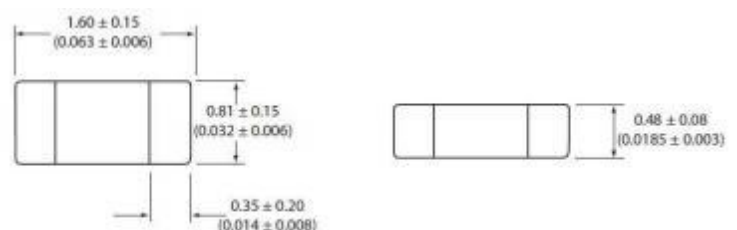
1. DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)
2. DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25degrees
3. Typical Pre-arcing I²t are measured at 10In Current

** 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

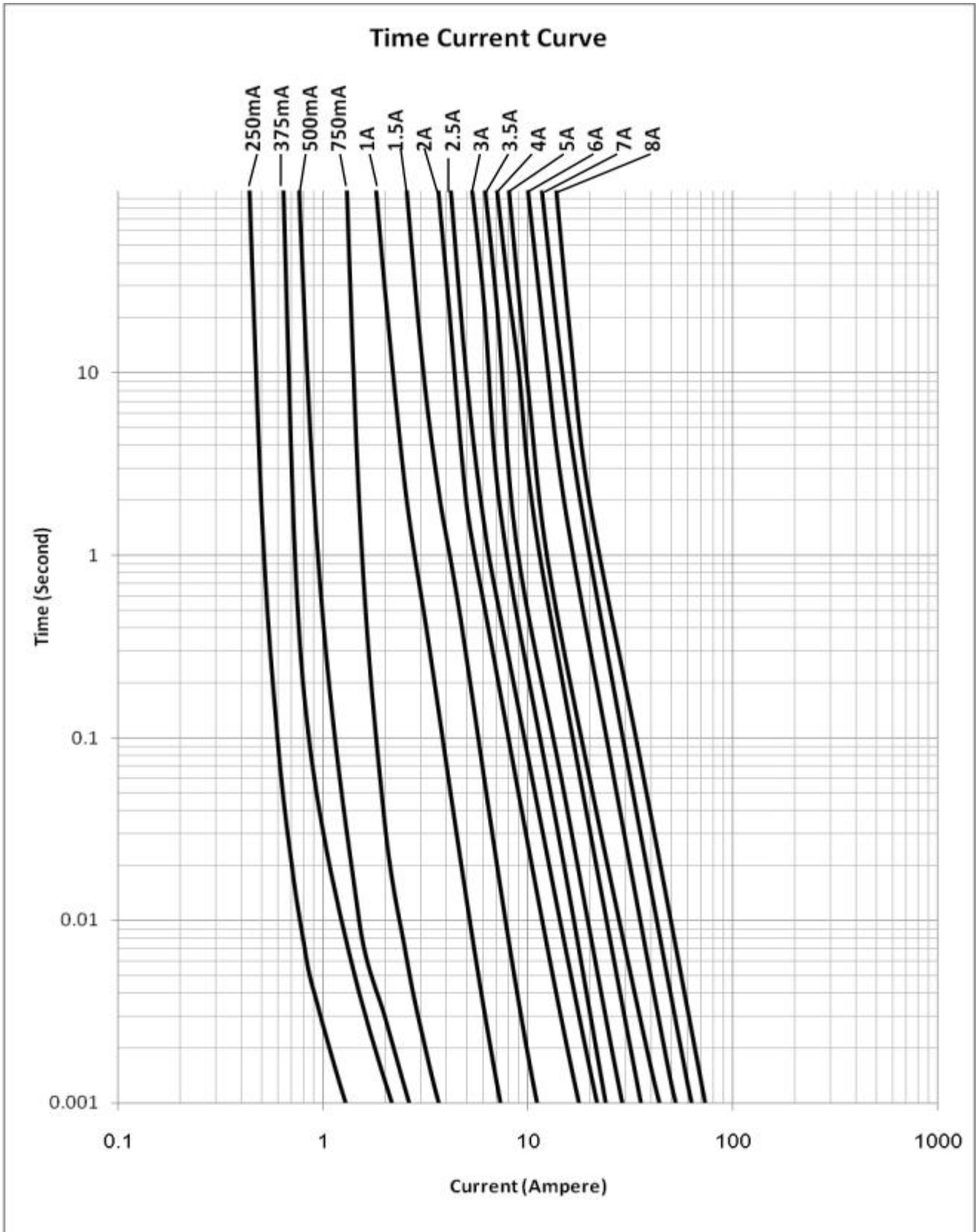
Drawing not to scale (Unit:mm/inch)





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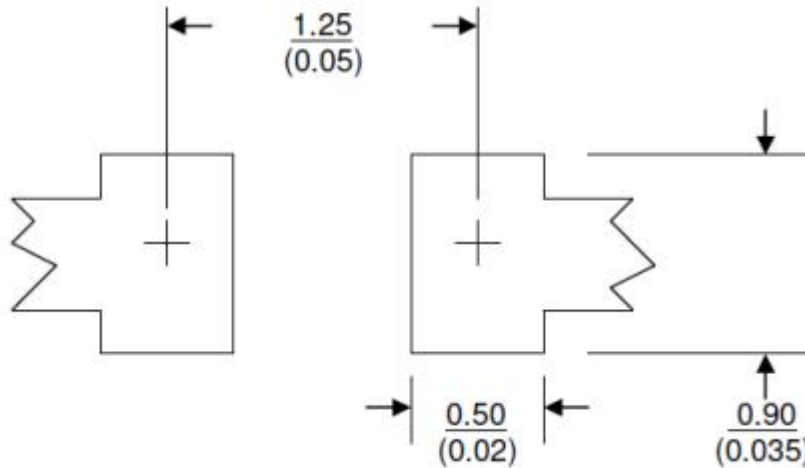


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Recommended land pattern



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

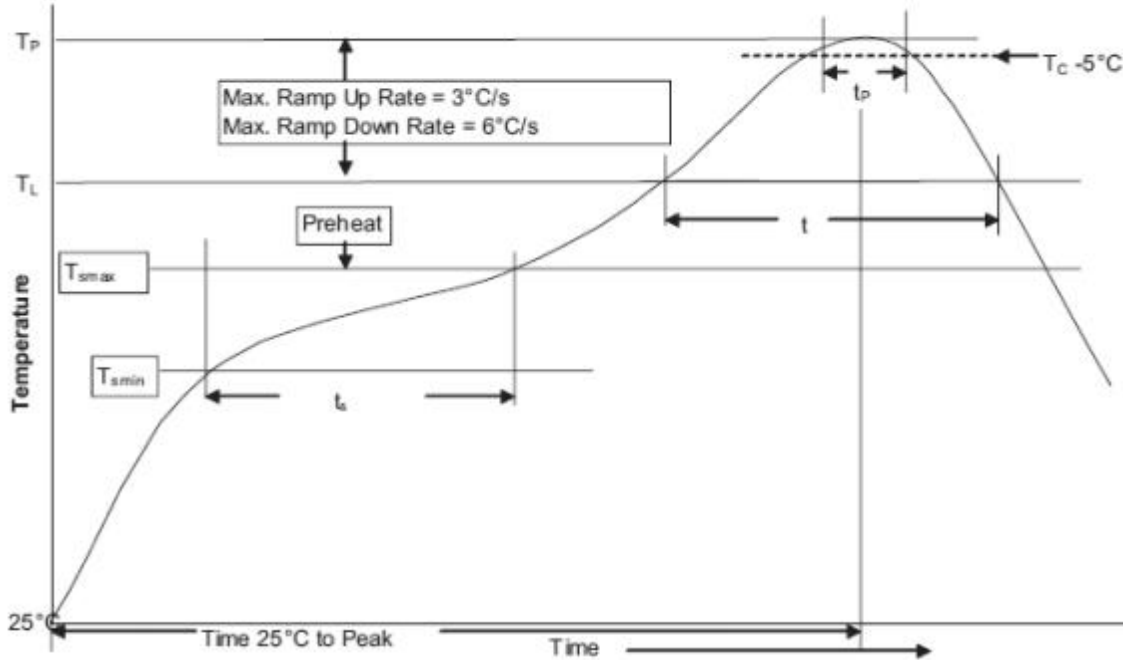
- Wave solder
 - Reservoir temperature: 260°C
 - Time in reservoir: 10 seconds maximum
- Infrared reflow
 - Temperature: 260°C
 - Time: 30 seconds maximum

Solder reflow profile



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Profile Feature		Lead(Pb) free solder
Preheat and soak	• Temperature min.(T_{smin})	150°C
	• Temperature max. (T_{smax})	200°C
	• Time (T_{smin} to T_{smax}) (t_s)	60 - 120 Seconds



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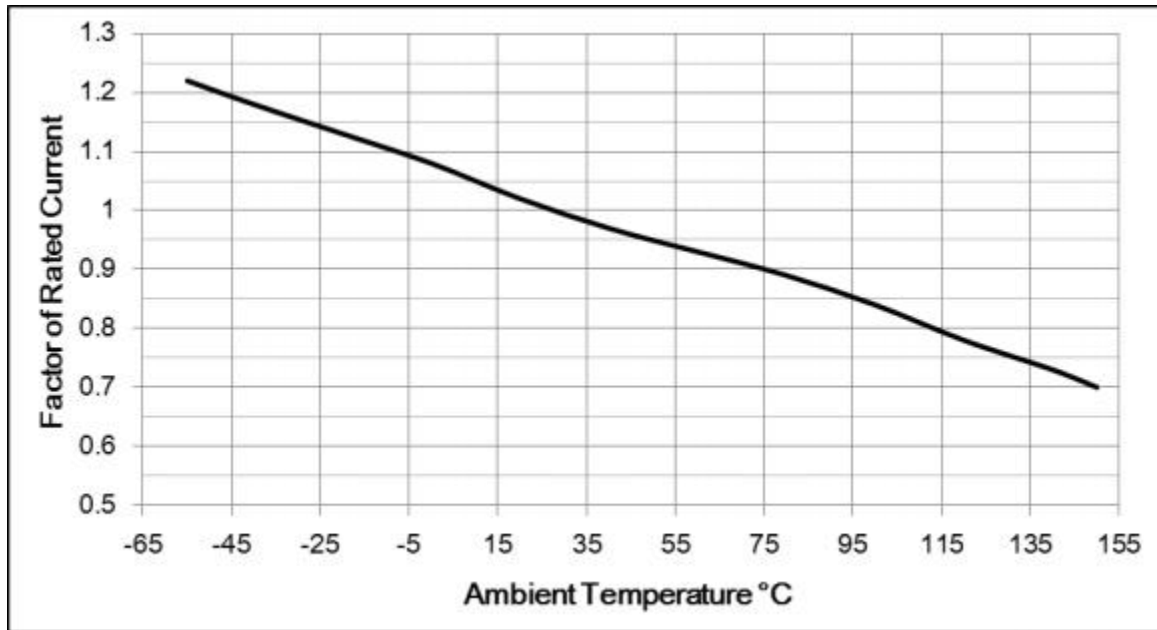


Average ramp up rate T_{smax} to T_p	3°C / Second Max.
Liquidous temperature (T_L)	217°C
Time at liquidous (t_L)	60 - 150 Seconds
Peak package body temperature (T_P)	260°C
Time (t_p) within 5°C of the specified classification temperature (T_C)	30 Seconds
Average ramp-down rate (T_P to T_{smax})	6°C /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