

Description

K0603 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.



Electrical Characteristics		
Rated Current	1.0In	2.0In
250mA~8A	4 hour minimum	60 sec maximum

Features

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

Specifications

Specification							
Part 序号	Rated Voltage DC	Rated Current (A)	Breaking Capacity (A) ¹	Typical Cold Resistance (m Ohms) ²	Typical Voltage Drop (m V)	Typical Pre-Arcing I ² t (A2Sec) ³	Alpha Mark
0.25	32V	0.250	0.250	3250	893	0.00042	D
0.375		0.375	0.375	1310	587	0.00093	E
0.5		0.500	0.500	1070	582	0.001	F
0.75		0.750	0.750	470	427	0.009	G
1		1	1	300	345	0.011	B
1.5		1.5	1.5	150	270	0.045	H
2		2	2	72	160	0.115	K
2.5		2.5	2.5	52	145	0.140	L
3		3	3	35	130	0.21	O
3.5		3.5	3.5	23.8	130	0.5	R
4		4	4	21	120	0.56	S
5		5	5	14	110	1.2	T
6		6	6	8.5	110	1.7	V
7		7	7	7.3	80	2.3	X
8		8	8	5.1	75	3.0	Z

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

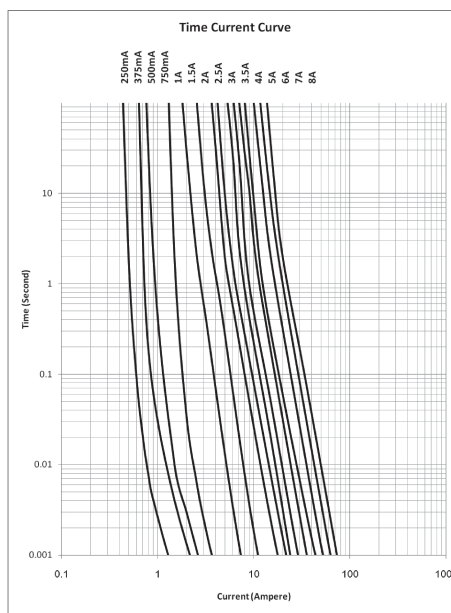
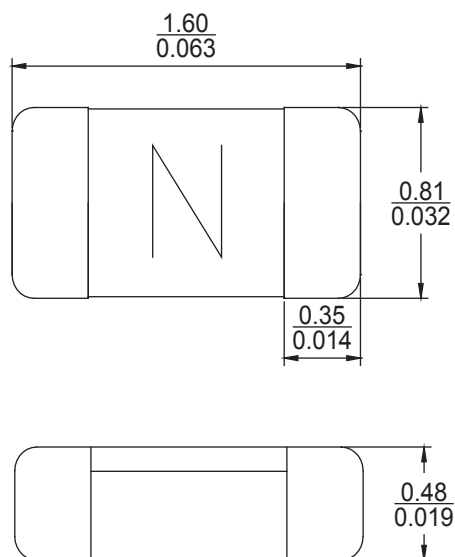
* DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25degrees

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

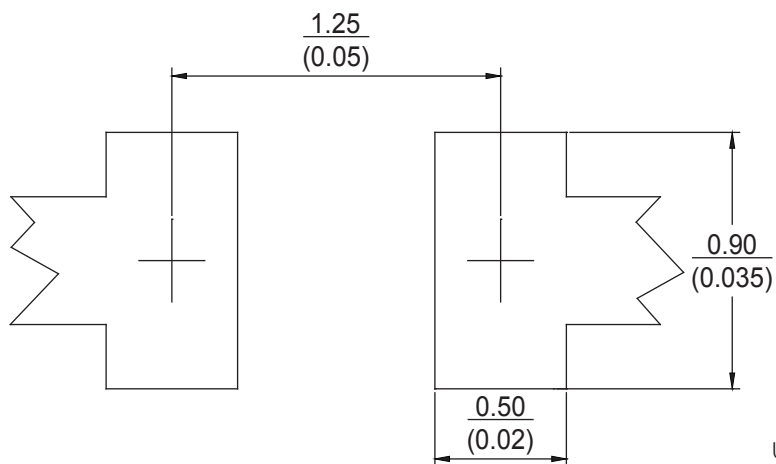
** For 1A-5A, the color of glass coating is Green; for others, it's Blue.

Dimension

Drawing not to scale (Unit: mm/inch)



Recommended Land Pattern



Unit: mm/inches

Soldering Method

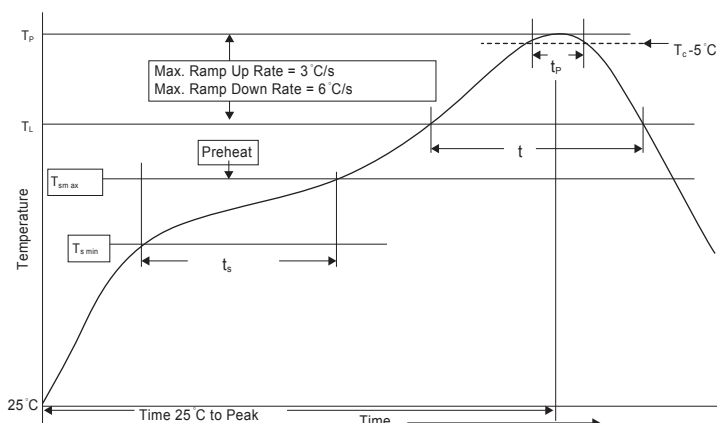
◆ Wave Solder

- * Reservoir temperature: 260°C
- * Time in reservoir: 10 seconds maximum

◆ Infrared Reflow

- * Temperature: 260°C
- * Time: 30 seconds maximum

Solder Reflow Profile



Specification		Lead(Pb) free solder
Preheat and soak	Temperature min. ($T_{s \min}$)	150°C
	Temperature max. ($T_{s \max}$)	200°C
	Time ($T_{s \min}$ to $T_{s \max}$) (t_s)	60 – 120 Seconds
Average ramp up rate $T_{s \max}$ to T_P		3°C / Second Max.
Liquidus temperature (T_L)		217°C
Time at liquidus (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 $T_{s \max}$)		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 ~ 125°C, with proper correction factor applied

