

## Description

06 100 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

## Specifications

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

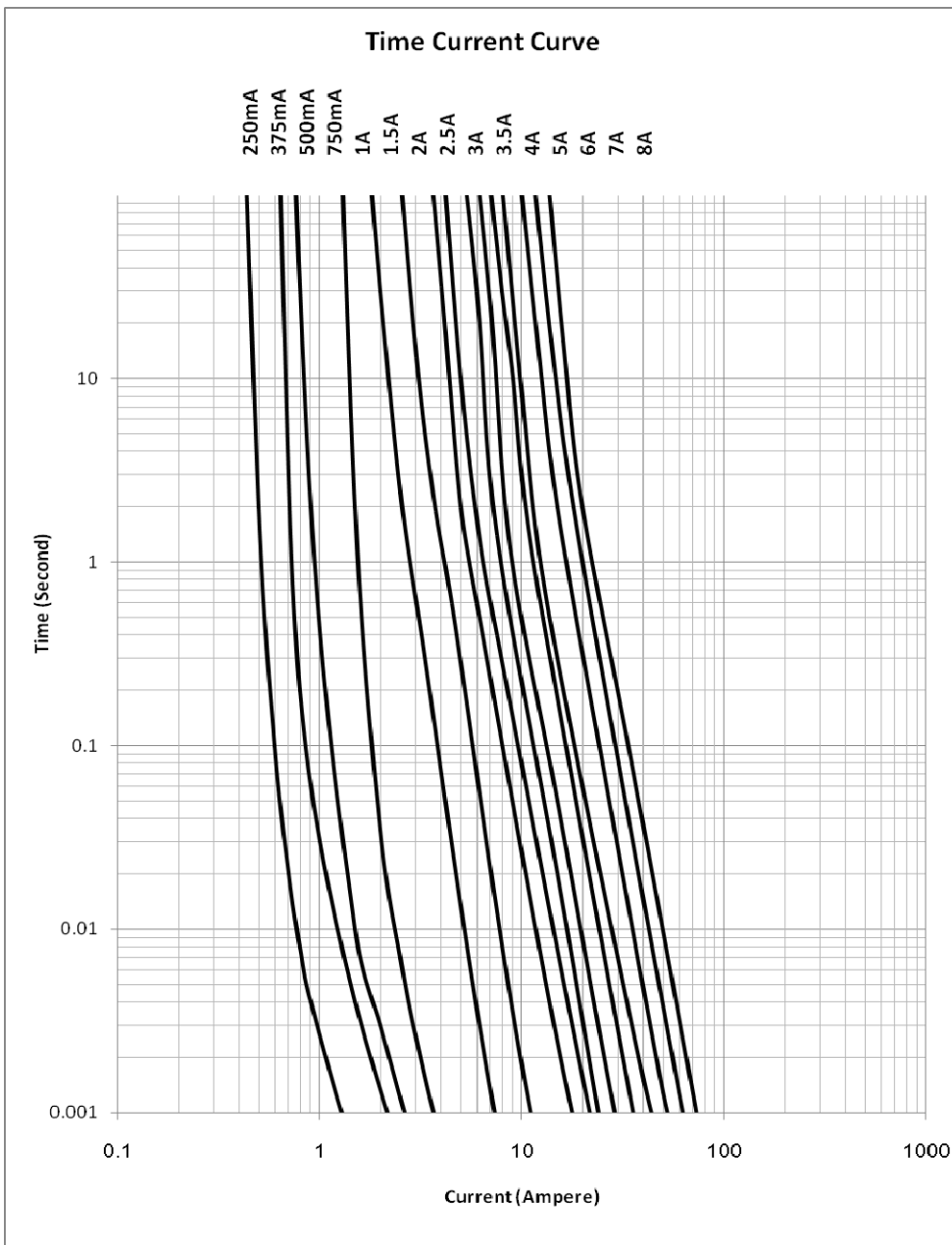
Part No.	Rated Voltage	Rated Current (A)	Breaking Capacity (A) <sup>1</sup>	Typical Cold Resistance (mOhms) <sup>2</sup>		Typical Voltage Drop (mV)	Typical Pre-Arcing I <sup>2</sup> t (A <sup>2</sup> Sec) <sup>3</sup>	Alpha Mark
	DC			Min	Max			
06 100 0.25	32V	0.250	50A	2150	4150	893	0.00042	D
06 100 0.375		0.375	50A	1230	2070	587	0.00093	E
06 100 0.5		0.500	50A	750	1250	582	0.001	F
06 100 0.75		0.750	50A	350	580	427	0.009	G
06 100 1		1	50A	225	375	345	0.011	B
06 100 1.5		1.5	50A	120	190	270	0.045	H
06 100 2		2	50A	60	100	160	0.115	K
06 100 2.5		2.5	50A	38	68	145	0.14	L
06 100 3		3	50A	25	45	130	0.21	O
06 100 3.5		3.5	50A	18	33	130	0.5	R
06 100 4		4	50A	16	27	120	0.56	S
06 100 5		5	50A	8.5	19	110	1.2	T
06 100 6		6	50A	5.8	13.1	110	1.7	V
06 100 7		7	50A	5.6	12.3	80	2.3	X
06 100 8		8	50A	4.0	7.5	75	3.0	Z

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

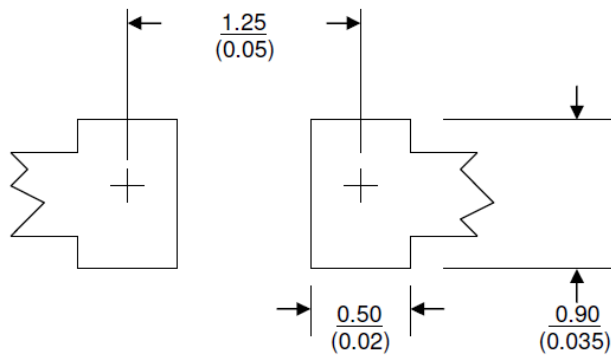
\* DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25degrees

\* Typical Pre-arching I<sup>2</sup>t are measured at 10In Current





**Recommended land pattern**

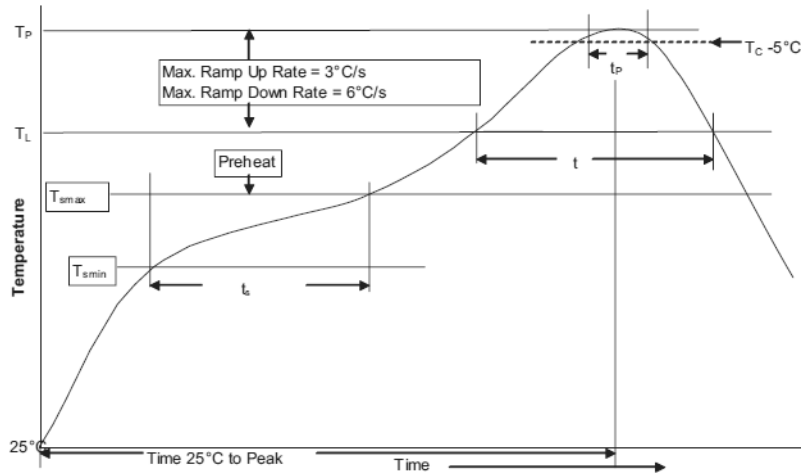


Unit: mm/inches

**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

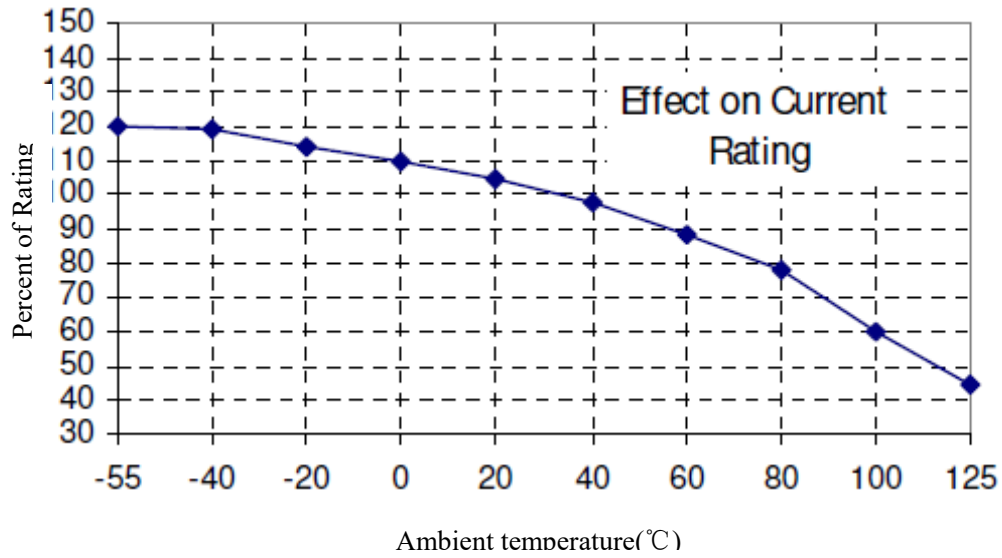


Profile Feature		Lead(Pb) free solder
Preheat and soak	• Temperature min. ( $T_{smin}$ )	150°C
	• Temperature max. ( $T_{smax}$ )	200°C
	• Time ( $T_{smin}$ to $T_{smax}$ ) ( $t_s$ )	60 - 120 Seconds
Average ramp up rate $T_{smax}$ to $T_P$		3°C / Second Max.
Liquidous temperature ( $T_L$ )		217°C
Time 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 ~ 125°C, with proper correction factor applied



**Environmental Characteristics**

Storage Conditions .....+40 °C Max. 70% RH Max. Packed in original packaging.

**Agency Approvals**

- Agency Approvals: UL、CSA
- Regulation/Standard: RoHS, Reach

**Package information**

Model	Q'ty/Reel
06 100 X	5000 pcs

Note: Reel packaging per EIA-481-1 standard