

# 600VDC, SMD Fuse

## A135001 Series



### Description

- 13.0x5.0x5.0mm physical size
- Ceramic tube, silver plated cap construction
- 600VDC High voltage rating



### Electrical Characteristics

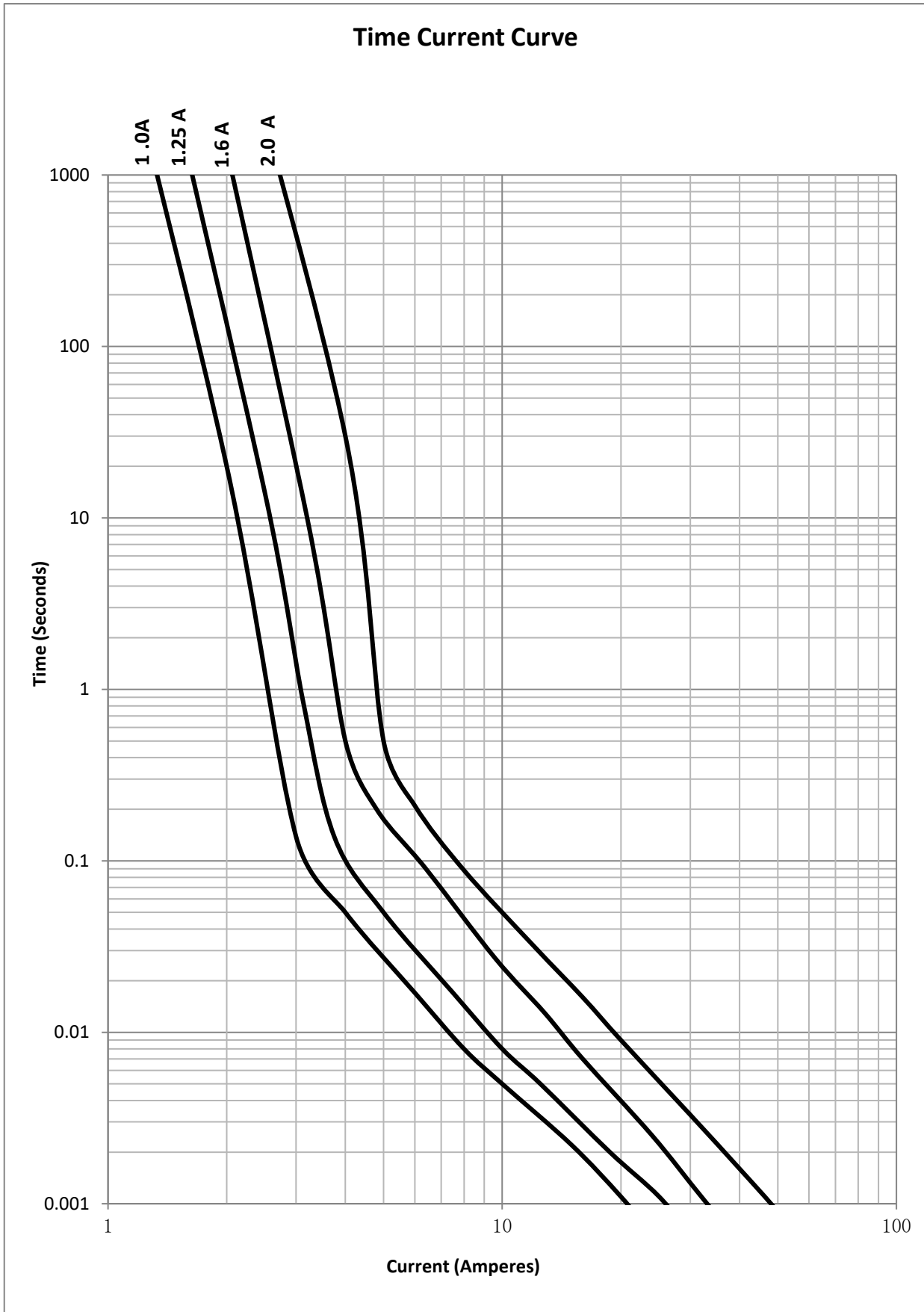
Ampere Rating	% of Rated Current	Opening Time
1A-7.5A	100%	1 hour, Minimum
1A-7.5A	200%	120 sec., Maximum

### Specifications

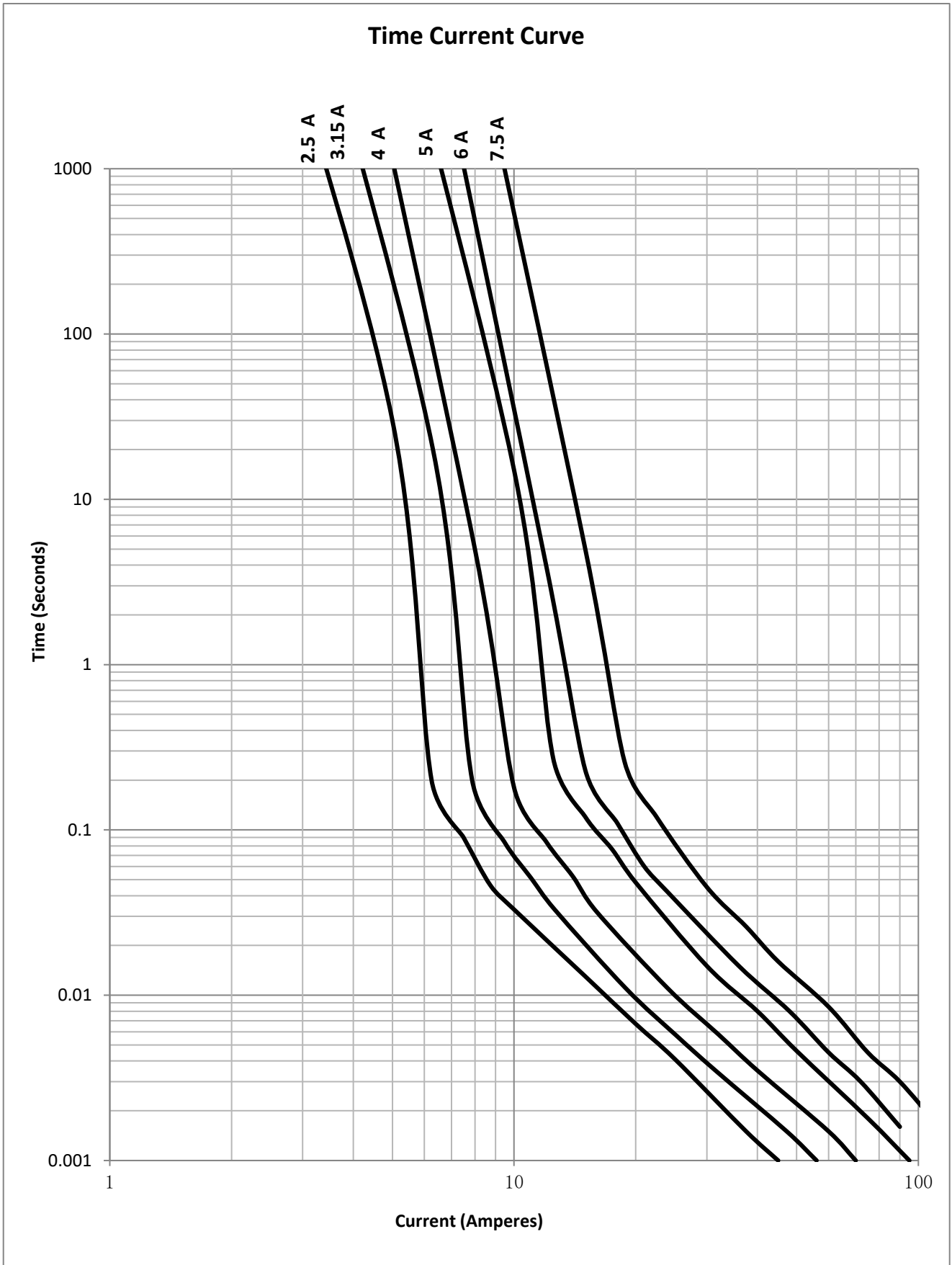
Part No.	Rated Voltage	Rated Current	Breaking Capacity (A) <sup>1</sup>	Typical Cold Resistance (mOhms) <sup>2</sup>	Typical Voltage Drop (mV)	Typical Pre-Arcing I <sup>2</sup> t (A <sup>2</sup> Sec) <sup>3</sup>	Alpha Mark
A135001.1	600Vdc 350Vac	1A	100A@600Vdc 100A@350Vac	252	335	0.50	1
A135001.1.25		1.25A		192	325	0.95	1.25
A135001.1.6		1.6A		116	230	2.3	1.6
A135001.2		2A		93	255	4.1	2
A135001.2.5		2.5A		51	174	2.6	2.5
A135001.3.15		3.15A		39	165	3.0	3.15
A135001.4	500Vdc 350Vac	4A	100A@500Vdc 100A@350Vac	31	175	5.5	4
A135001.5		5A		20	155	11.5	5
A135001.6	400Vdc 350Vac	6A	100A@400Vdc 100A@350Vac	16.3	155	15	6
A135001.7.5		7.5A		13.5	165	25	7.5

1. AC Interrupting Rating (measured at designated voltage, 100% power factor); DC Interrupting Rating (measured at designated 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 25°C
3. Typical Pre-arcing I<sup>2</sup>t are measured at 10In Current, DC battery bank.

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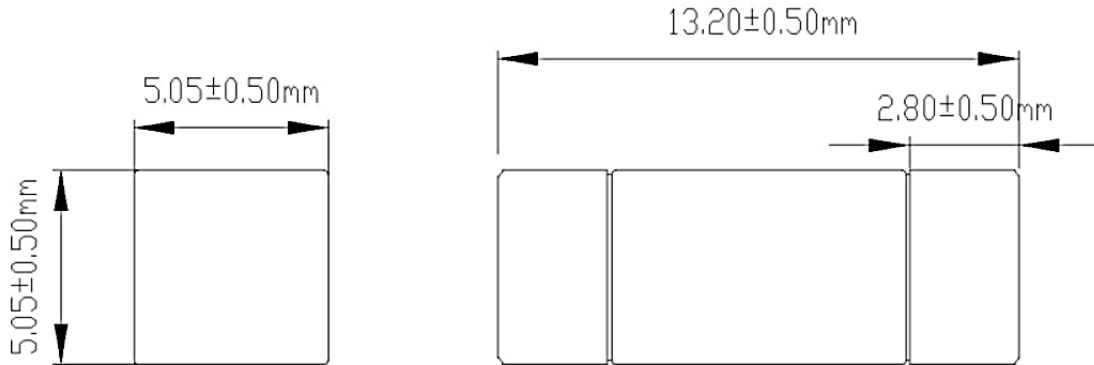
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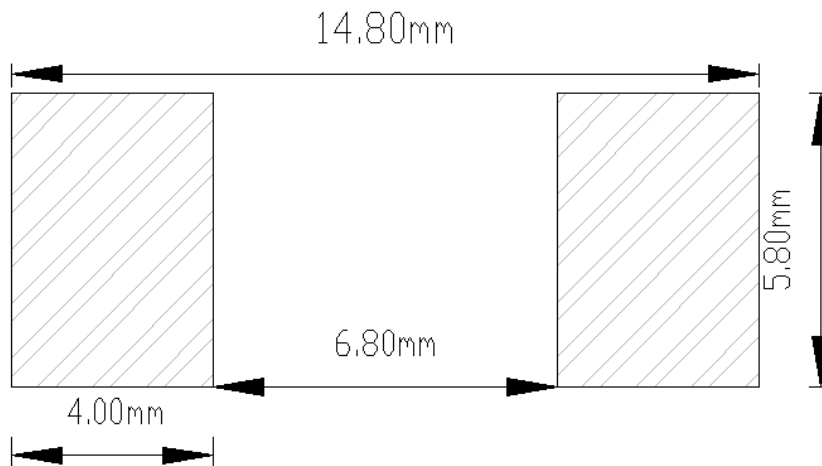
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**Dimension :**



**Recommended Pad Layout:**



Recommend Stencil thickness is 0.15mm;

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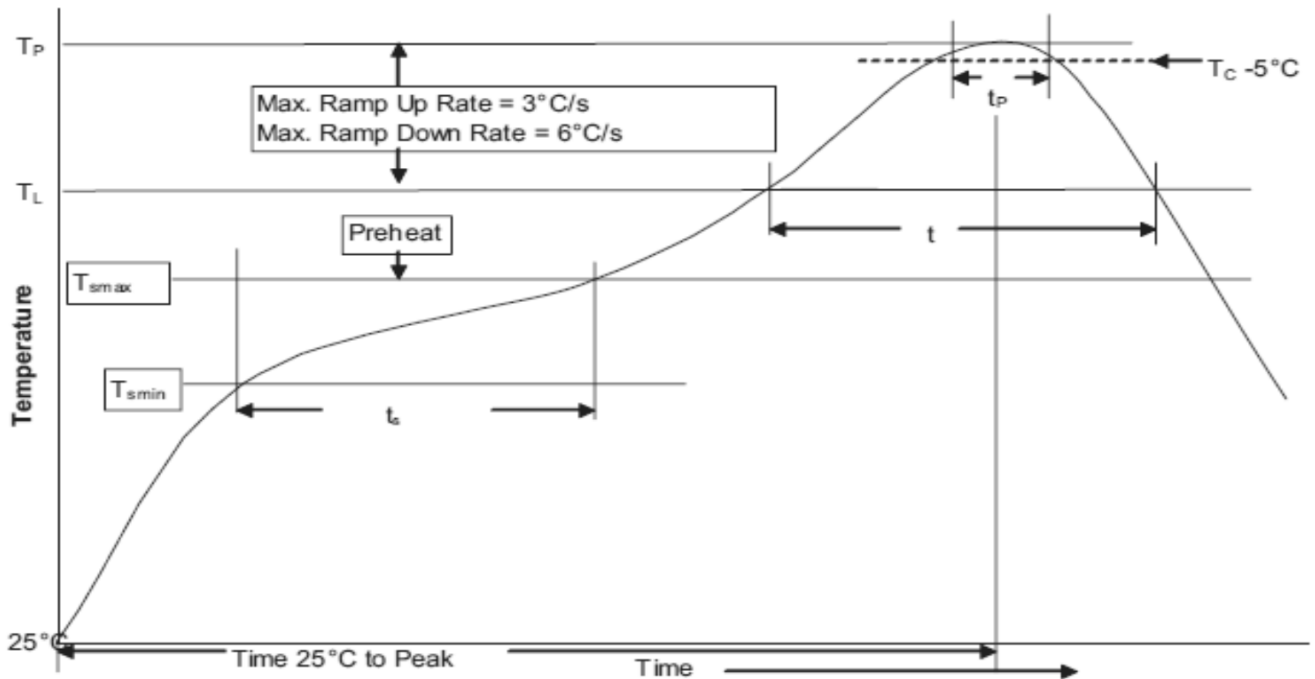
## Soldering Characteristics

### Reflow Soldering

- Temperature: 260° C
- Time: 30 Seconds Maximum

### Manual Soldering (not recommended)

- Temperature: 350° C
- Time: 5 Seconds Maximum



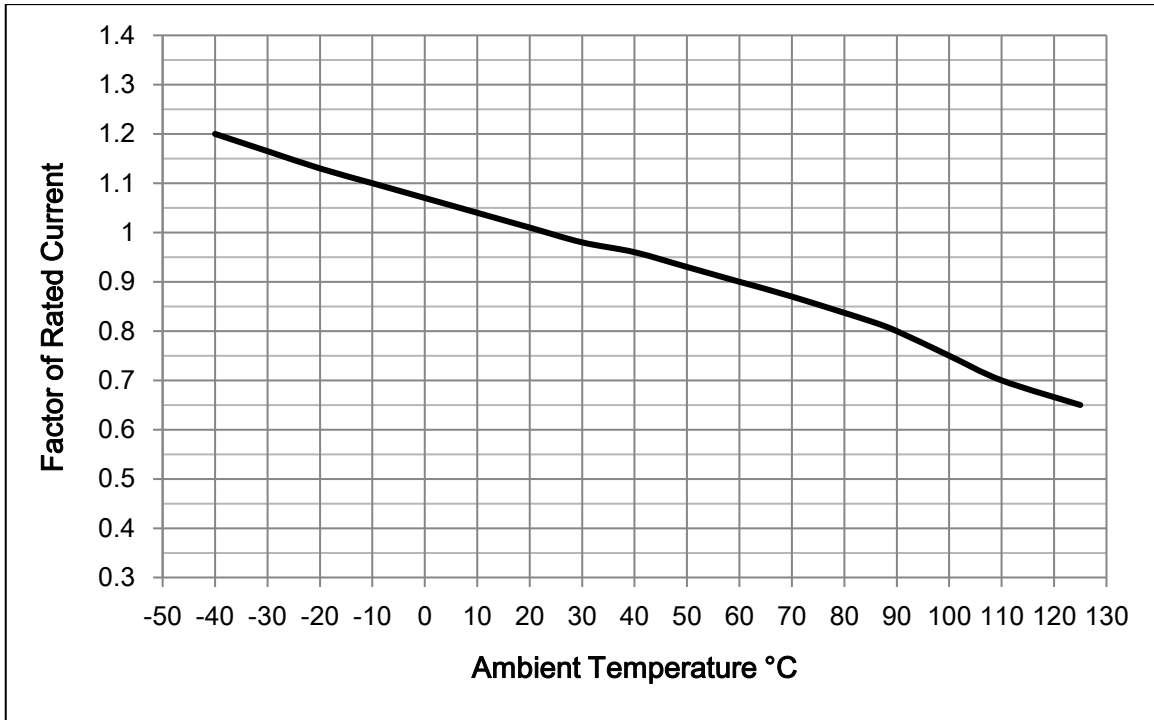
Profile Feature		Lead(Pb) free solder
Preheat and soak	• Temperature min. ( $T_{smin}$ )	150°C
	• Temperature max. ( $T_{smax}$ )	200°C
	• Time ( $T_{smin}$ to $T_{smax}$ ) ( $t_s$ )	60 - 120 Seconds
Average ramp up rate $T_{smax}$ to $T_P$		3°C / Second Max.
Liquidous temperature ( $T_L$ )		217°C
Time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

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### Temperature derating curve

- Normal Operating Temperature:  $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$
- Operating Temperature:  $-40^{\circ}\text{C}$  to  $125^{\circ}\text{C}$  with proper correction factor applied.
- Chart of correction factor



### Package and Minimum Order QTY

1000pcs fuses in tape (width 24mm) and reel (dia. 13inch).