



1206 Fast Acting SMD Fuses

12 100 Series



Description

12 100 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.



Electrical Characteristics

Rated Current	1.0In	2.5In	3.5In
250mA~5A	4 hour min.	5 sec max.	-
6A~30A		-	5 sec max.

Features

- AEC-Q200 Automotive Grade Certified
- Rapid interruption of excessive current
- Compatible with reflow and wave solder
- Ceramic and glass construction
- One time positive disconnect
- Lead Free and Halogen free material

Specifications

Specification							
Part No.	Rated Voltage DC	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 Marking
12 100.0.25	72V 63V 32V 24V	250mA	50A@72V 50A@63V 50A@32V 300A@24V	3608	1407	0.0004	.25
12 100.0.375		375mA		1882	718	0.0008	E
12 100.0.5		500mA		1028	650	0.0022	0.5
12 100.0.75		750mA		601	616	0.0057	.75
12 100.1		1A		490	510	0.10	H
12 100.1.5		1.5A		240	367	0.15	K
12 100.2		2A		144	316	0.41	N
12 100.2.5		2.5A		83	240	0.65	O
12 100.3		3A		53	187	1.39	P
12 100.3.5		3.5A		40	180	1.68	R
12 100.4		4A		35	173	1.73	S
12 100.4.5	32V 24V	4.5A	50A@32V 300A@24V	27	164	2.62	X
12 100.5		5A		22	141	2.89	T
12 100.7		7A		12	140	5.68	7
12 100.8	24V	8A	300A@24V	8.5	110	8	M
12 100.10		10A		7	100	9.5	U
12 100.12		12A		5	85	11.5	12
12 100.15		15A		3.5	78	16.5	15
12 100.20		20A		1.6	60	47.17	20
12 100.25		25A		1.4	57	32	25
12 100.30		30A		1	68	43	30

* 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 25°C

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



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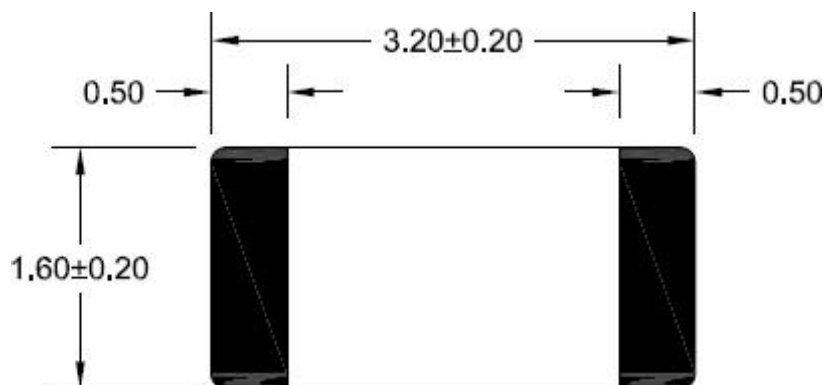
12 100 Series



Dimension

Drawing not to scale (Unit: mm)

Top view



Side view:

250mA~750mA/20A~30A



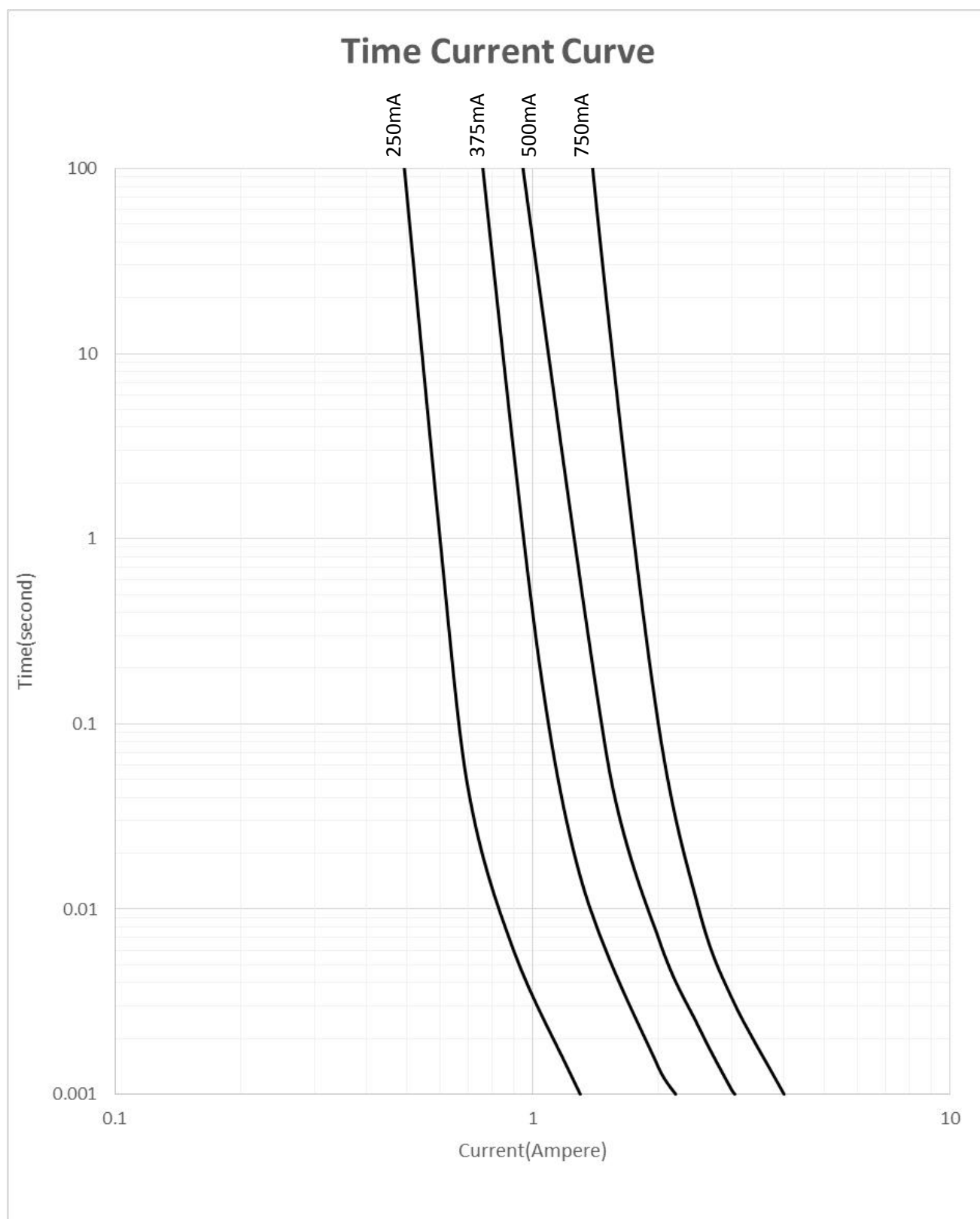
1A~15A





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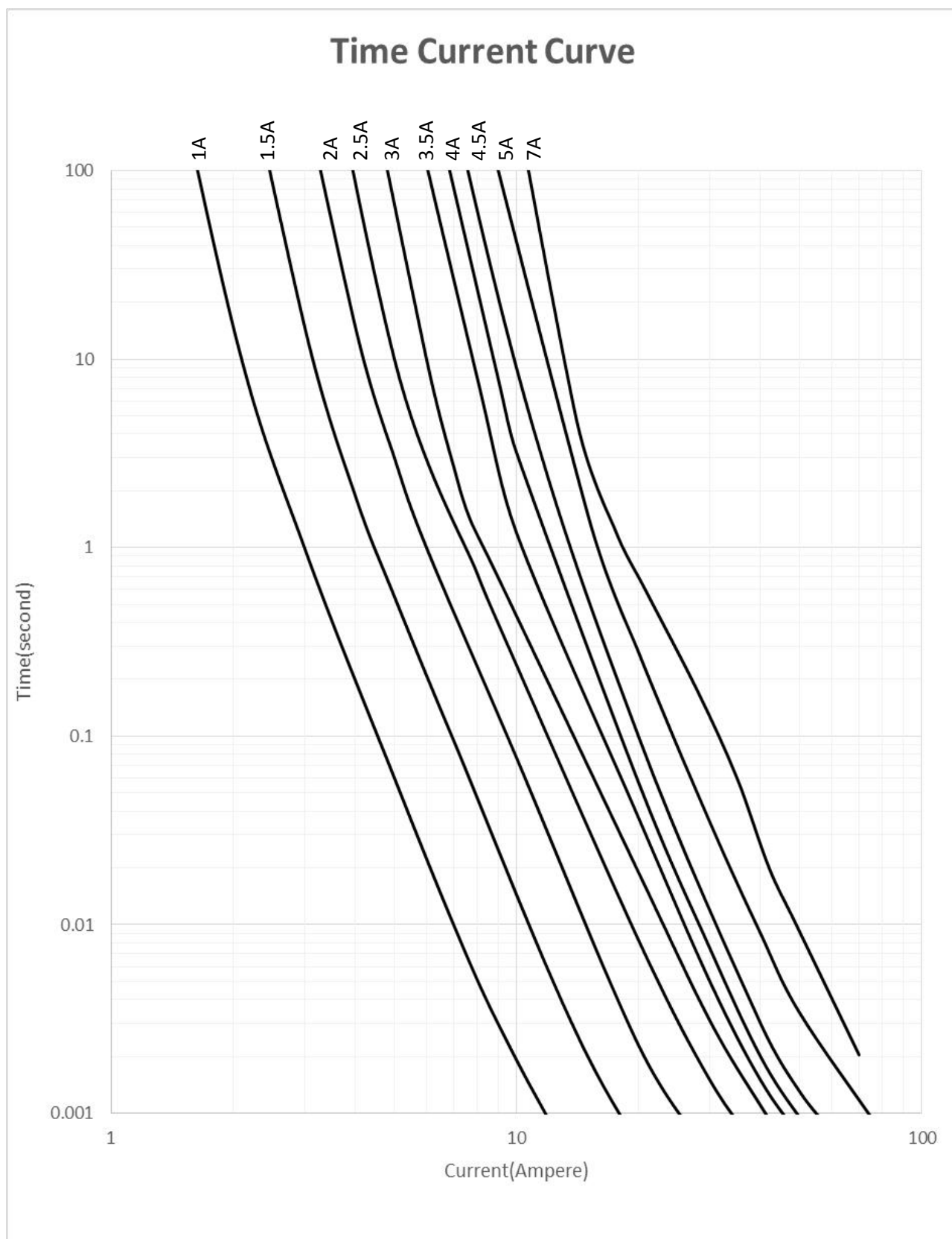
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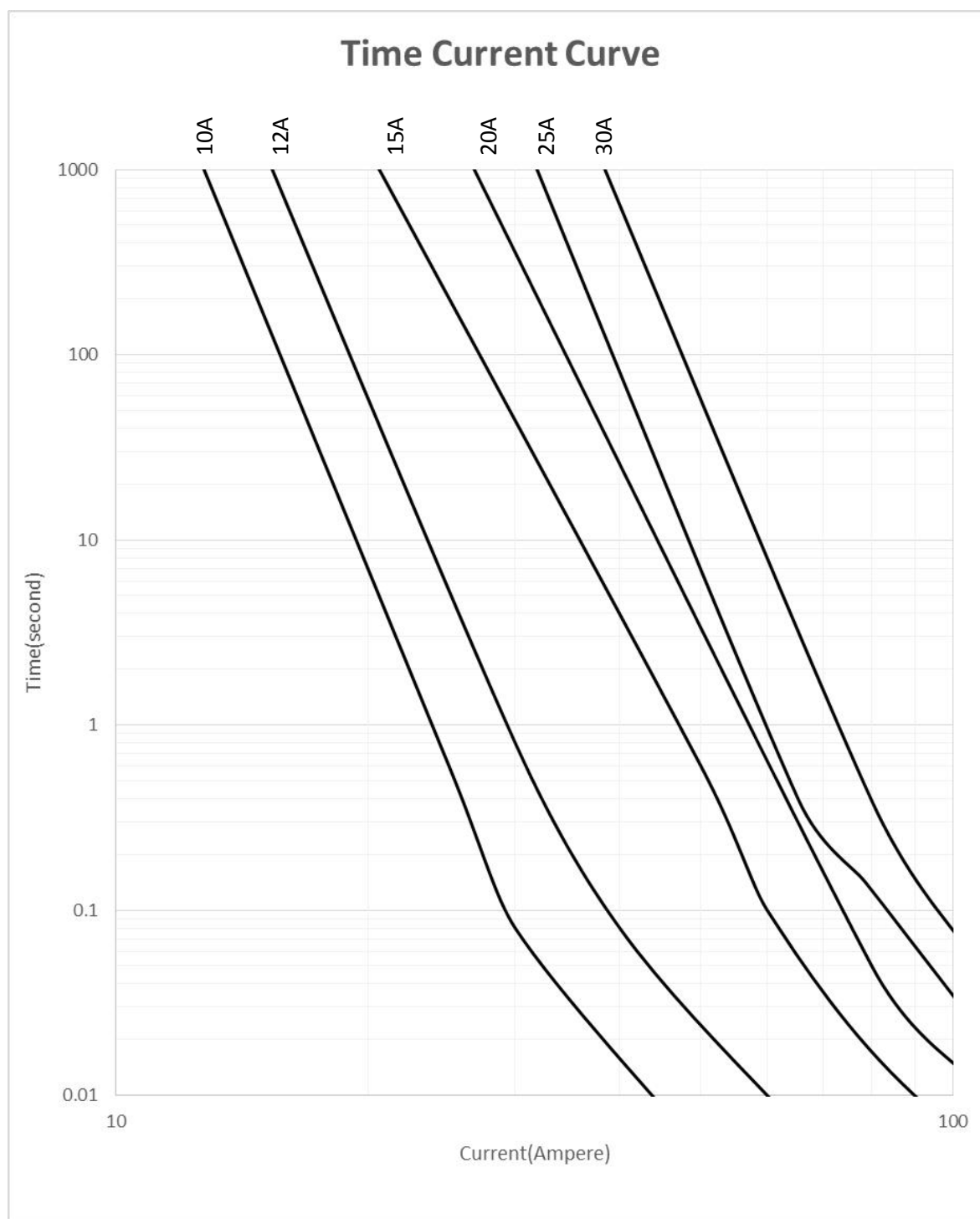
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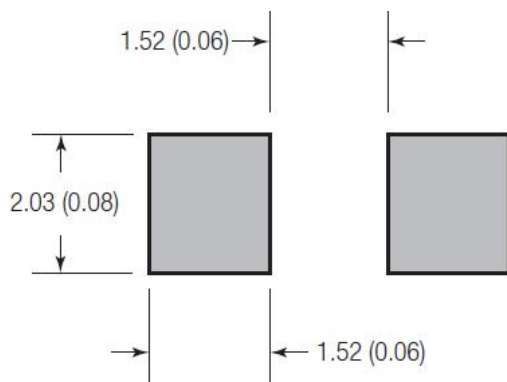


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Recommended land pattern

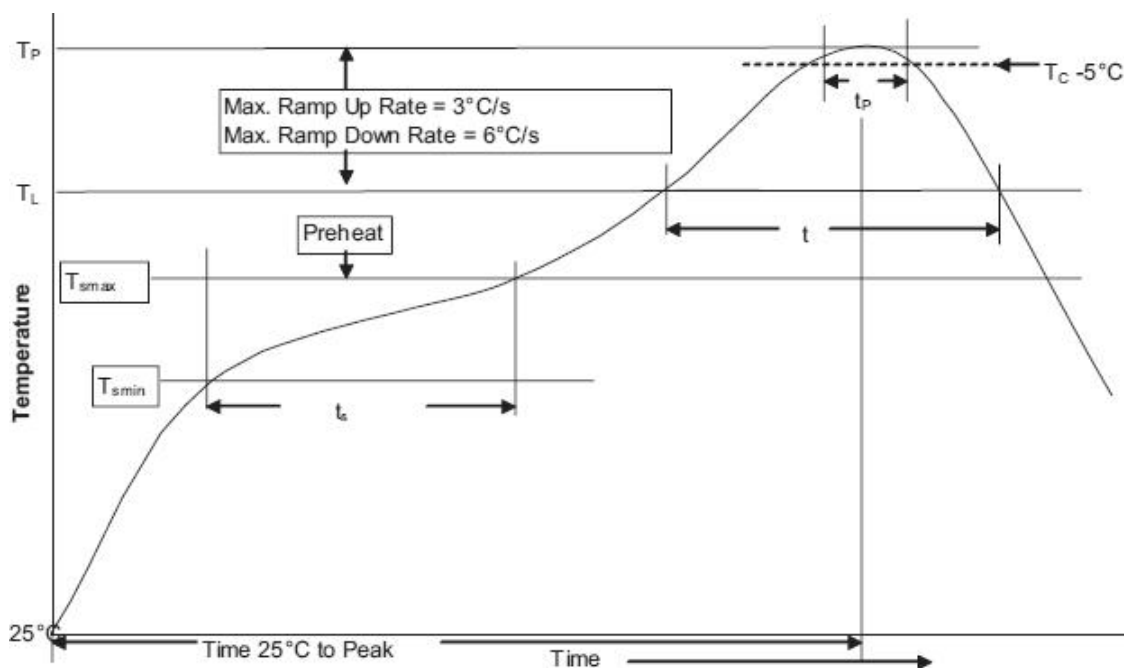


Unit: mm(inch)

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



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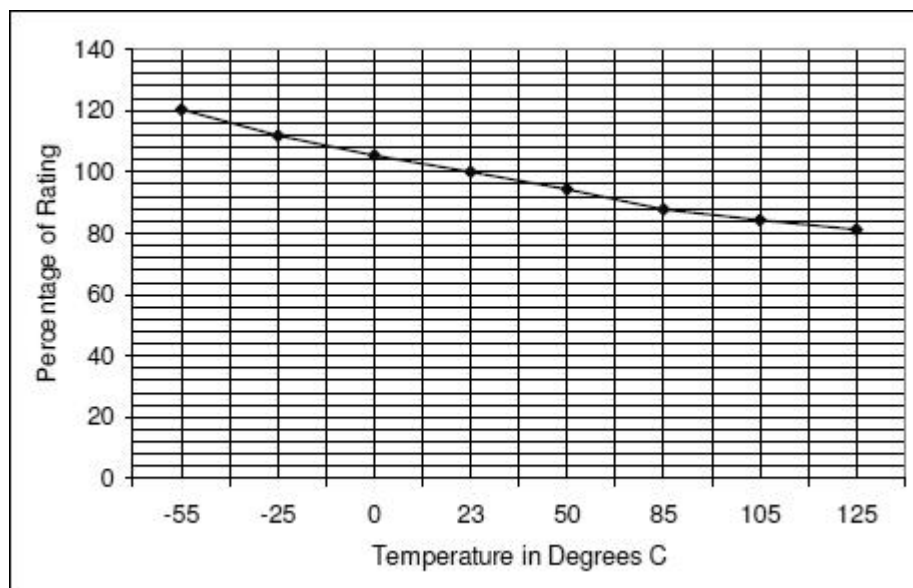


Average ramp up rate T_{smax} to T_p	3°C / Second Max.
Liquidous temperature (T_L)	217°C
Time at liquidous (t_L)	60 - 150 Seconds
Peak package body temperature (T_P)	260°C
Time (t_P) within 5°C of the specified classification temperature (T_C)	30 Seconds
Average ramp-down rate (T_P to T_{smax})	6°C /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

Temperature Derating Curve

Normal ambient temperature: 23+/-3°C

Operating temperature: -55 ~ 125°C, with proper correction factor applied



Package

3000 fuses on 8mm tape-and-reel on a 7 inch (178mm) reel per EIA Standard 481.

--- End Of Document ---

Website: <http://www.jksemi.com>

For additional information, please contact your local Sales Representative.

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