

1040 Fast Acting Fuse

1040 100 Series



Description

- Fast Acting fuse
- 4X4X12mm physical size
- Ceramic tube, silver plated brass cap construction
- Designed to IEC60127-4, Universal Modular Fuse-links(UMF)
- 350VAC/DC voltage rating



Electrical Characteristics

Rating	% rated current	Opening Time
500mA ~ 6.3A	125%	1hours, Minimum
500mA ~ 6.3A	200%	120sec., Maximum
500mA ~ 6.3A	1000%	10ms. , Maximum

Temperature Rise

Ampere rating	Temp. Rise(K)
500mA~6.3A	95 Max

Specifications

Catalog Symbol	Rated Voltage		Rated Current	Breaking Capacity (A) ¹		Nominal Cold DCR*(mΩ) ²	Voltage Drop(mV)	Typical Melt I ² t ³
	AC	DC		AC	DC			
1040 100.500	250V 350V	250V 350V	500mA	150A	100A	Typ	Max	A ² sec
1040 100.630			630mA			300	600	0.025
1040 100.800			800mA			200	500	0.08
1040 100.1			1A			145	400	0.13
1040 100.1.25			1.25A			95	300	0.30
1040 100.1.6			1.6A			70	300	0.63
1040 100.2			2A			58	300	1.02
1040 100.2.5			2.5A			40	300	2.00
1040 100.3			3A			48	300	1.25
1040 100.3.15			3.15A			35	300	3.20
1040 100.4			4A			30	300	3.97
1040 100.5			5A			25	300	6.40
1040 100.6.3			6.3A			16	300	12.5
		13	300	23.8				

1 AC Interrupting Rating (Measured at designated voltage, 100% power factor random closing)

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

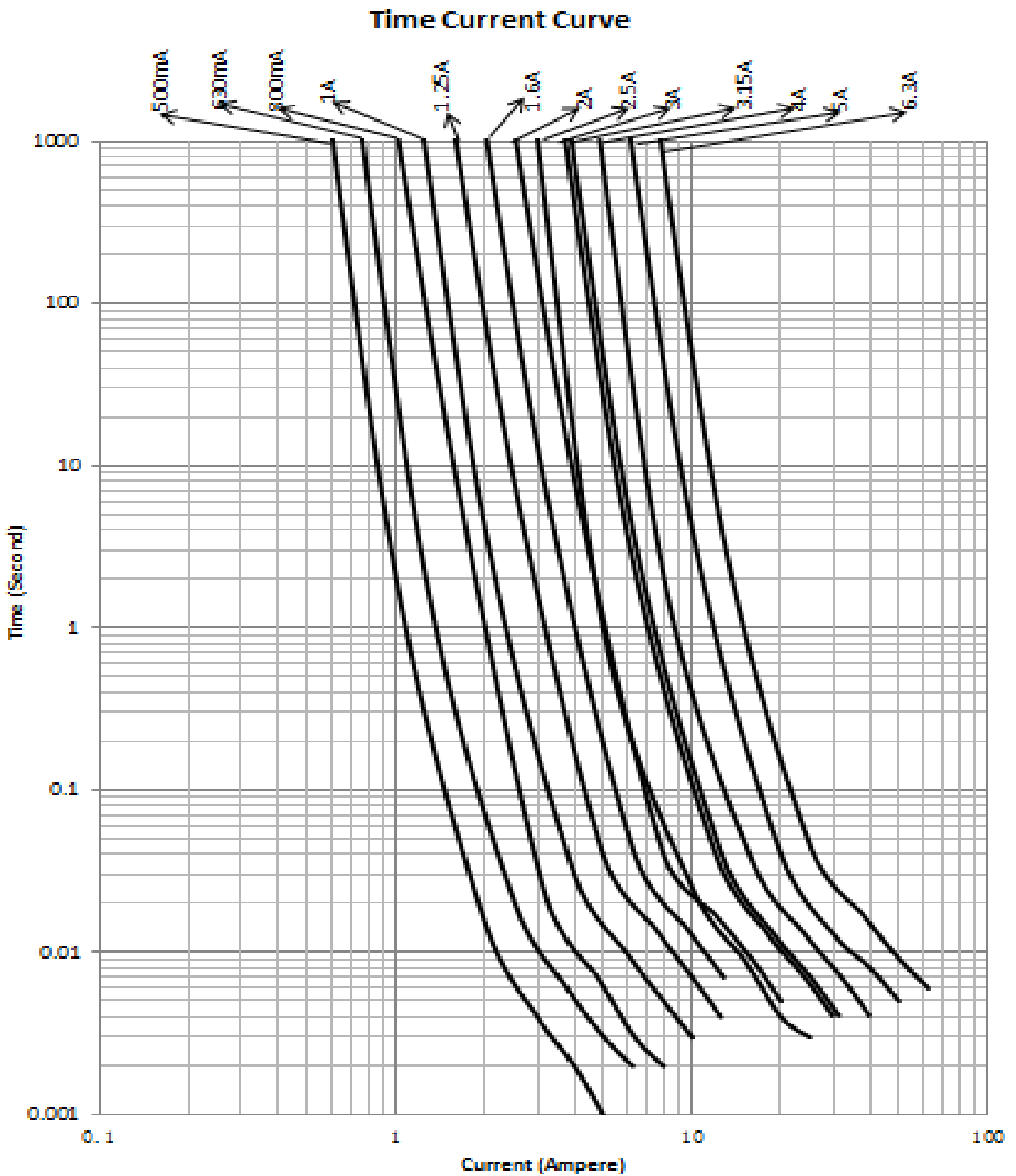
3 Typical Pre-arcing I²t are measured at 10In Current, DC battery bank, but not exceeding the interrupting rating, time constant of calibrated circuit less than 50 microseconds)

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Time-Current Curves

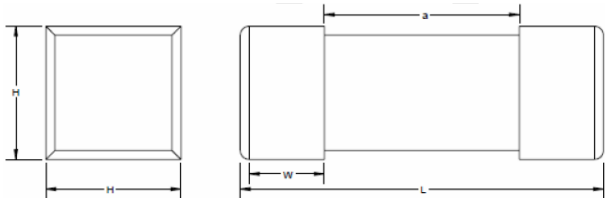


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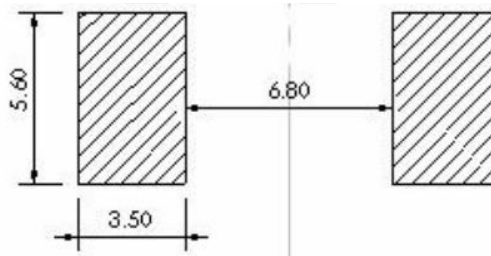


Dimension



Unit	L	W	H	a
mm	12 Max	2.6±0.3	4.4±0.3	>3

Recommended Pad Layout



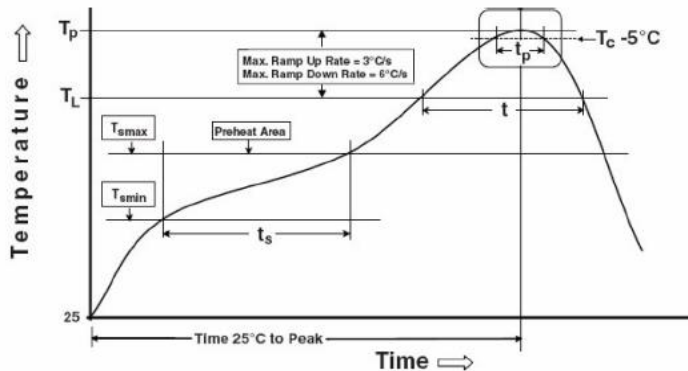
Soldering Characteristics

Reflow Soldering

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

Manual Soldering (not recommended)

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



Profile Feature	Sn-Pb Eutectic Assembly	Pb-Free Assembly
Preheat & Soak		
Temperature min (T_{smin})	100 °C	150 °C
Temperature max (T_{smax})	150 °C	200 °C
Time (T_{smin} to T_{smax}) (t_s)	60-120 seconds	60-120 seconds
Average ramp-up rate (T_{smax} to T_p)	3 °C/second max.	3 °C/second max.
Liquidous temperature (T_L)	183 °C	217 °C
Time at liquidous (t_L)	60-150 seconds	60-150 seconds
Peak package body temperature (T_p)*	See classification temp in Table 4.1	See classification temp in Table 4.2
Time (t_p)** within 5 °C of the specified classification temperature (T_c)	20** seconds	30** seconds
Average ramp-down rate (T_p to T_{smax})	6 °C/second max.	6 °C/second max.
Time 25 °C to peak temperature	6 minutes max.	8 minutes max.

* Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.
 ** Tolerance for time at peak profile temperature (t_p) is defined as a supplier minimum and a user maximum.

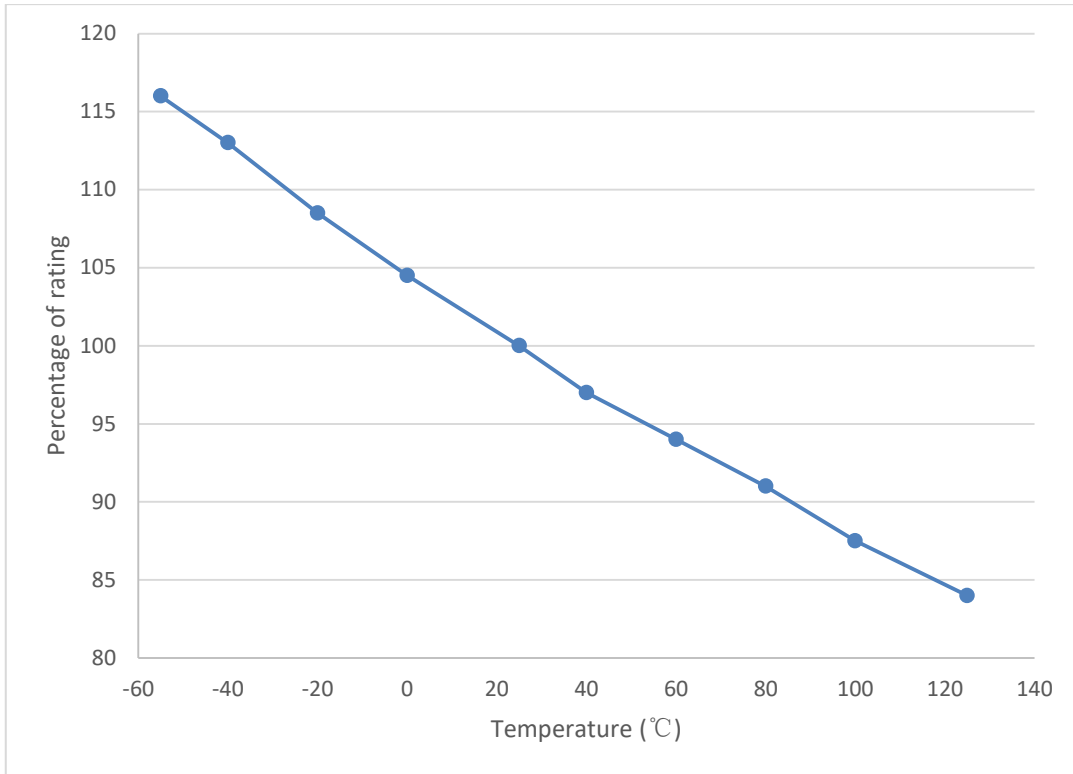
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Temperature derating curve

- Normal Operating Temperature: 25°C ± 2°C
- Operating Temperature: -55°C to 125°C with proper correction factor applied.
- Chart of correction factor



Package

1000 pieces in a reel and 6 reels in 1 carton