Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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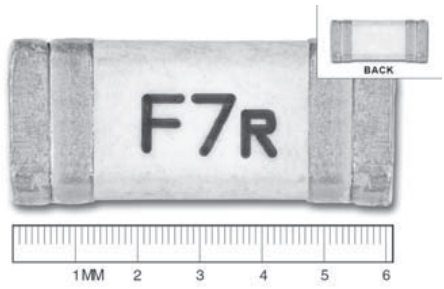
6125FF

Fast-acting subminiature fuses



Product description

- Fast-acting surface mount fuse
- Overcurrent protection of systems up to 125Vac/72Vdc
- High inrush withstand capability
- Solder immersion compatible

Applications

- Power supplies
- Servers
- LED/LCD televisions
- Appliances and white goods
- LCD monitor/backlight inverters
- Laptops and notebooks

Agency information

- cURus Recognition file number: E19180, Guide JDYX2/JDYX8

Ordering

Specify part number and packaging prefix as shown

Packaging prefix	Part number
TR2-	6125FF1-R

Packaging prefixes

- TR2- (Tape and reel, 5000 parts per 13" diameter reel)

Electrical characteristics

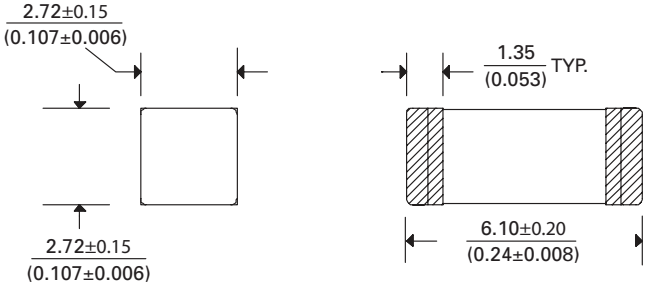
% of Amp Rating	Opening Time
100%	4 Hours Minimum
200%	5 Second Maximum

Product specifications

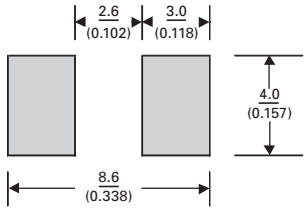
Part Number[3]	Current rating (amps)	Voltage rating		Interrupting rating[1] (amps)			DC cold resistance (mΩ) Typ.	Melting[2] I^2t (A^2 second)	Typical voltage drop (mV)
		Vac	Vdc	125Vac	72Vdc	32Vdc			
6125FF500-R	500mA	125	72	50	50	300	750	0.08	605
6125FF750-R	750mA	125	72	50	50	300	350	0.152	433
6125FF1-R	1	125	72	50	50	300	260	0.22	415
6125FF1.25-R	1.25	125	72	50	50	300	171	0.355	410
6125FF1.5-R	1.5	125	72	50	50	300	112	0.456	365
6125FF2-R	2	125	72	50	50	300	49	1.67	160
6125FF2.5-R	2.5	125	72	50	50	300	45	5.20	155
6125FF3-R	3	125	72	50	50	300	35	6.24	153
6125FF3.5-R	3.5	125	72	50	50	300	27	7.28	150
6125FF4-R	4	125	72	50	50	300	26	7.4	145
6125FF5-R	5	125	72	50	50	300	17	9.5	141
6125FF6.3-R	6.3	125	72	50	50	300	14	15.1	135
6125FF7-R	7	125	72	50	50	300	11	37.25	112
6125FF8-R	8	125	72	50	50	300	8.7	70	110
6125FF10-R	10	125	72	50	50	300	7.3	67.75	110
6125FF12-R	12	125	72	50	50	300	5.3	210.59	106
6125FF15-R	15	125	72	50	50	300	4.2	296.10	104

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 Typical Melting I^2t (Measured at 72Vdc, 10X rated current (not exceed 50A - IR @ 72Vdc)
3 Part number definition: 6125FFxxx-R
6125FF= Product code and size
xxx= Ampere
-R= RoHS compliant

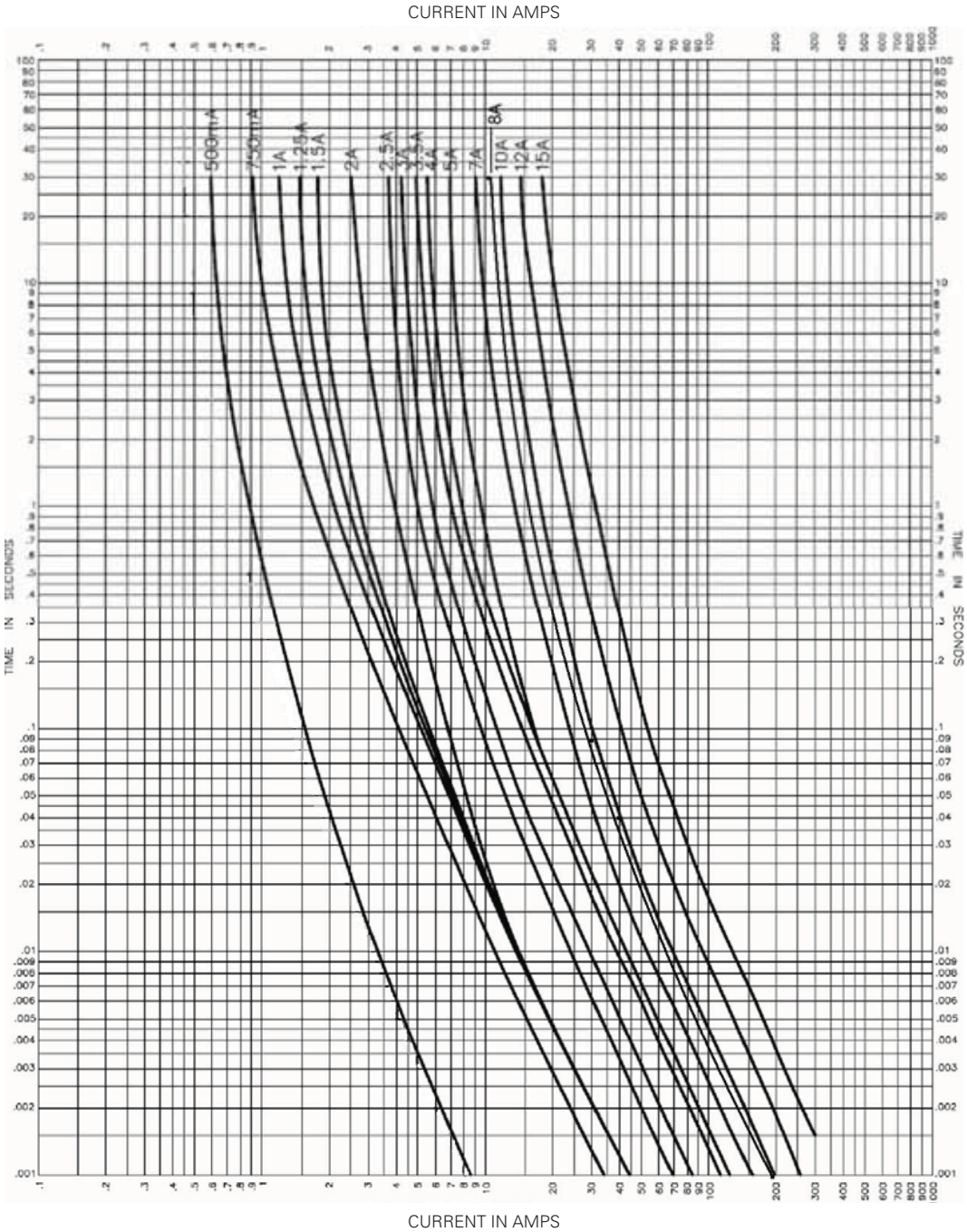
Dimensions–mm (in)



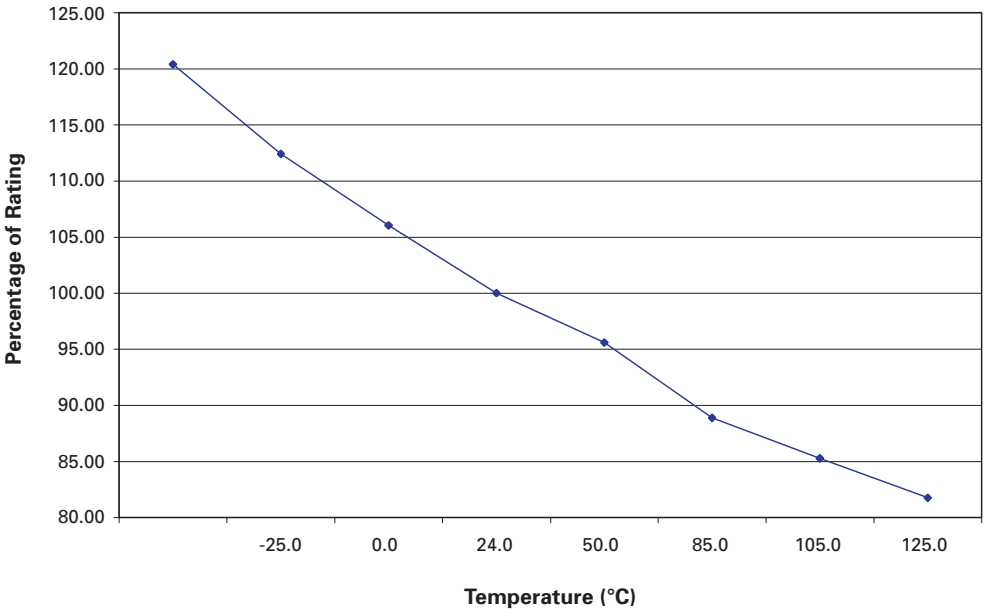
Recommended pad layout–mm (in)



Time vs. current curve



Temperature derating curve



Environmental data

Operating temperature: -55°C to 125°C (with derating)
Storage temperature: -55°C to 125°C
Mechanical shock: MIL- STD- 202, method 213
High frequency vibration: MIL- STD- 202, method 204
Load humidity: MIL- STD- 202, method 103
Moisture resistance: MIL- STD- 202, method 106
Resistance to solvents: MIL- STD- 202, method 215
Thermal shock: MIL- STD- 202, Method 107

Solder Reflow Profile

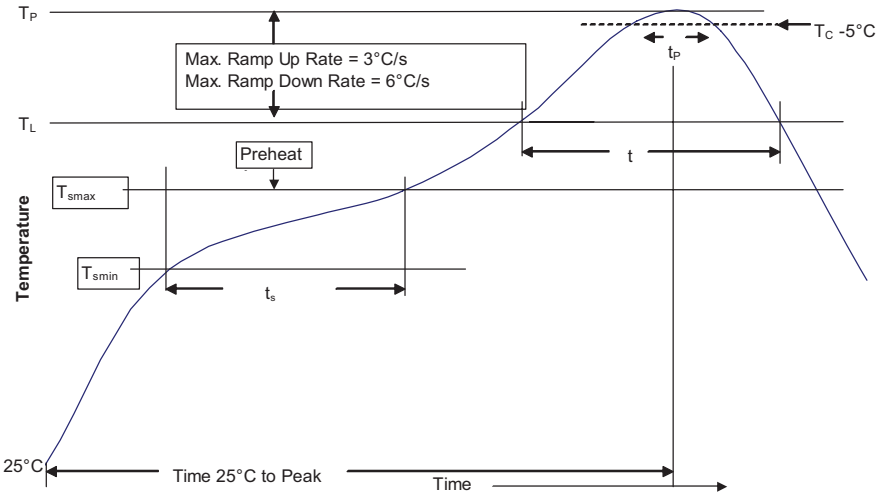


Table 1 - Standard SnPb Solder (T_C)

Package Thickness	Volume mm3 <350	Volume mm3 ≥350
<2.5mm)	235°C	220°C
≥2.5mm	220°C	220°C

Table 2 - Lead (Pb) Free Solder (T_C)

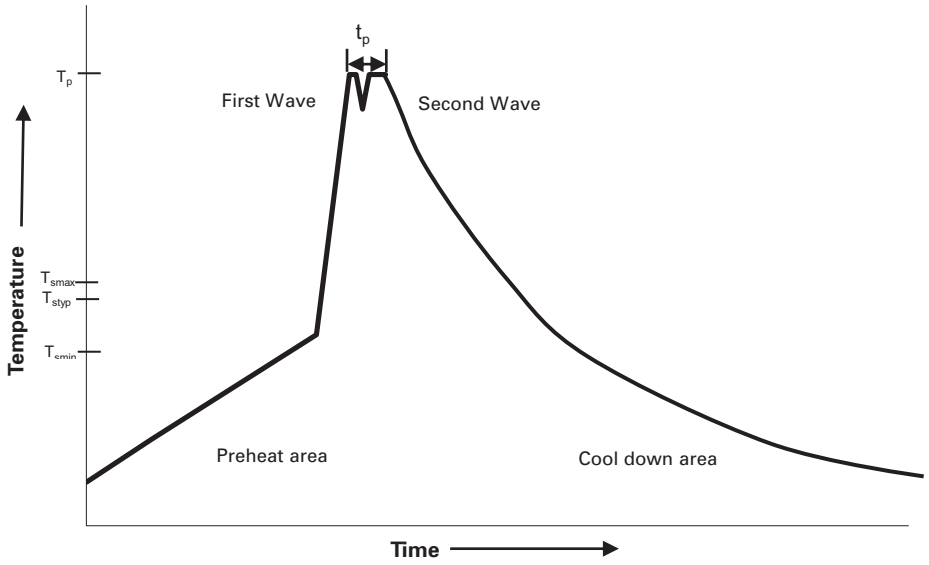
Package Thickness	Volume mm³ <350	Volume mm³ 350 - 2000	Volume mm³ >2000
<1.6mm	260°C	260°C	260°C
1.6 – 2.5mm	260°C	250°C	245°C
>2.5mm	250°C	245°C	245°C

Reference JDEC J-STD-020D

Profile Feature		Standard SnPb Solder	Lead (Pb) Free Solder
Preheat and 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) Time at liquidous (t_L)		183°C 60-150 Seconds	217°C 60-150 Seconds
Peak package body temperature (T_P)*		Table 1	Table 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.

Wave solder profile



Reference EN 61760-1:2006

Profile feature	Standard SnPb solder	Lead (Pb) free solder
Preheat and soak • Temperature min. (T_{smin})	100°C	100°C
• Temperature typ. (T_{styp})	120°C	120°C
• Temperature max. (T_{smax})	130°C	130°C
• Time max. (T_{smin} to T_{smax}) (t_s)	70 Seconds	70 Seconds
Δ preheat to max Temeperature	150°C max.	150°C max.
Peak temperature (Tp)	235°C - 260°C	250°C - 260°C
Peak package body temperature (Tp)*	Table 1	Table 2
Time at peak temperature (t_p)	10 seconds max 5 seconds max each wave	10 seconds max 5 seconds max each
Ramp-down rate	~ 2 K/s min ~3.5 K/s typ ~5 K/s max	~ 2 K/s min ~3.5 K/s typ ~5 K/s max
Time 25°C to 25°C	4 minutes	4 minutes

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