

Fast Acting | 0.126x0.064 inch Thick Film Chip Fuses

1206FA Series

1206FA 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.

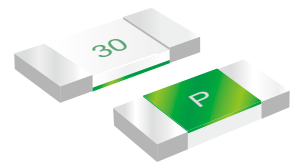


Features

- AEC-Q200 Automotive Grade Certified
- 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

Applications

- Flat panel displays and televisions
- Automotive infotainment and ECU
- Computer servers
- Portable electronics
- Mobile device chargers
- Power Battery Packs



Electrical Characteristics

Amp Rating	% of Amp Rating	Opening Time
0.25~40A	100%	4 Hours Min.
0.25~5A	250%	5 Seconds Max.
6~40A	350%	5 Seconds Max.

Specification

Part Number	Ampere Rating (A)	Voltage Rating	Interrupting Rating	Typical Cold Resistance (Ohms)	Typical Melting I ² t (A ² Sec)	Typical Voltage Drop (V)	Marking Code
1206FA-R250	0.250	72Vdc @ 50A 63Vdc @ 50A 32Vdc @ 150A 24Vdc @ 300A		3.608	0.0004	1.407	.25
1206FA-R375	0.375			1.882	0.0008	0.718	E
1206FA-R500	0.500			1.028	0.0022	0.650	0.5
1206FA-R750	0.750			0.601	0.0057	0.616	.75
1206FA-1A	1.00			0.490	0.100	0.510	H
1206FA-1.5A	1.50			0.240	0.150	0.367	K
1206FA-2A	2.00			0.132	0.385	0.316	N
1206FA-2.5A	2.50			0.077	0.650	0.240	O
1206FA-3A	3.00			0.048	1.150	0.187	P
1206FA-3.5A	3.50			0.040	1.630	0.180	R
1206FA-4A	4.00	32Vdc @ 150A 24Vdc @ 300A		0.035	1.730	0.173	S
1206FA-4.5A	4.50			0.030	2.000	0.164	X
1206FA-5A	5.00			0.025	2.890	0.141	T
1206FA-6A	6.00			0.0165	11.00	0.142	F
1206FA-7A	7.00			0.0120	12.50	0.140	7
1206FA-8A	8.00			0.0085	14.00	0.110	M
1206FA-10A	10.0			0.0068	20.00	0.100	U
1206FA-12A	12.0			32Vdc @ 150A 24Vdc @ 300A		0.0050	9.20
1206FA-15A	15.0	0.0039	14.00			0.078	15
1206FA-20A	20.0	0.0018	47.17			0.060	20
1206FA-25A	25.0	0.0015	32.00			0.057	25
1206FA-30A	30.0	0.00125	43.00			0.068	30
1206FA-40A	40.0	24Vdc @ 200A 32Vdc @ 200A				0.00085	240.0

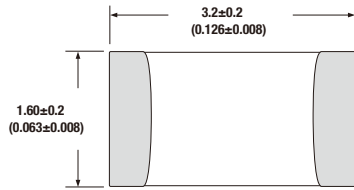
◦ DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)
 ◦ DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25°C
 ◦ Typical Pre-arcing I²t are measured at 10In Current
 Specifications are subject to change without notice. Application testing is strongly recommended.

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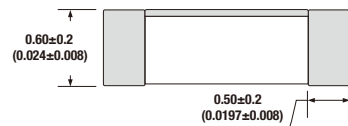
Dimension Unit: mm/inch



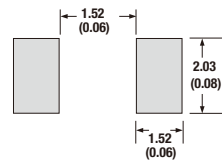
250mA-750mA/20A-40A



1A-15A



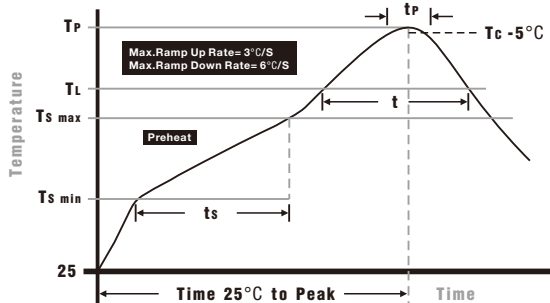
Pad layout



Packaging

- Quantity: 3,000pcs
- 8mm wide tape on 178mm(7 inch) diameter reel -specification EIA Standard 481.

Soldering Parameters

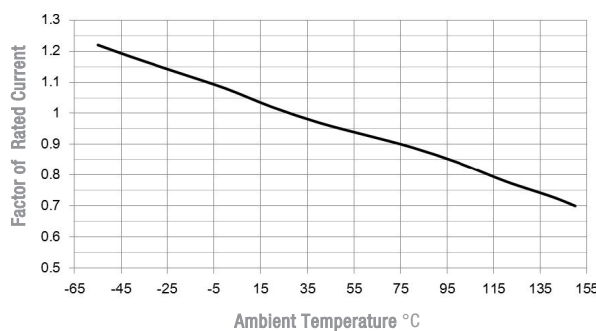


Wave Soldering: 260°C, 10 seconds max.
Infrared Reflow: 260°C, 30 seconds max.

IR Reflow Profile

Preheat Heat	
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)	
Time at liquidous (t _l)	60 - 150 seconds
Peak temperature(T_p)	
	260+0/-5°C
Time within 5°C of actual peak Temperature (t_p)	
	10 – 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



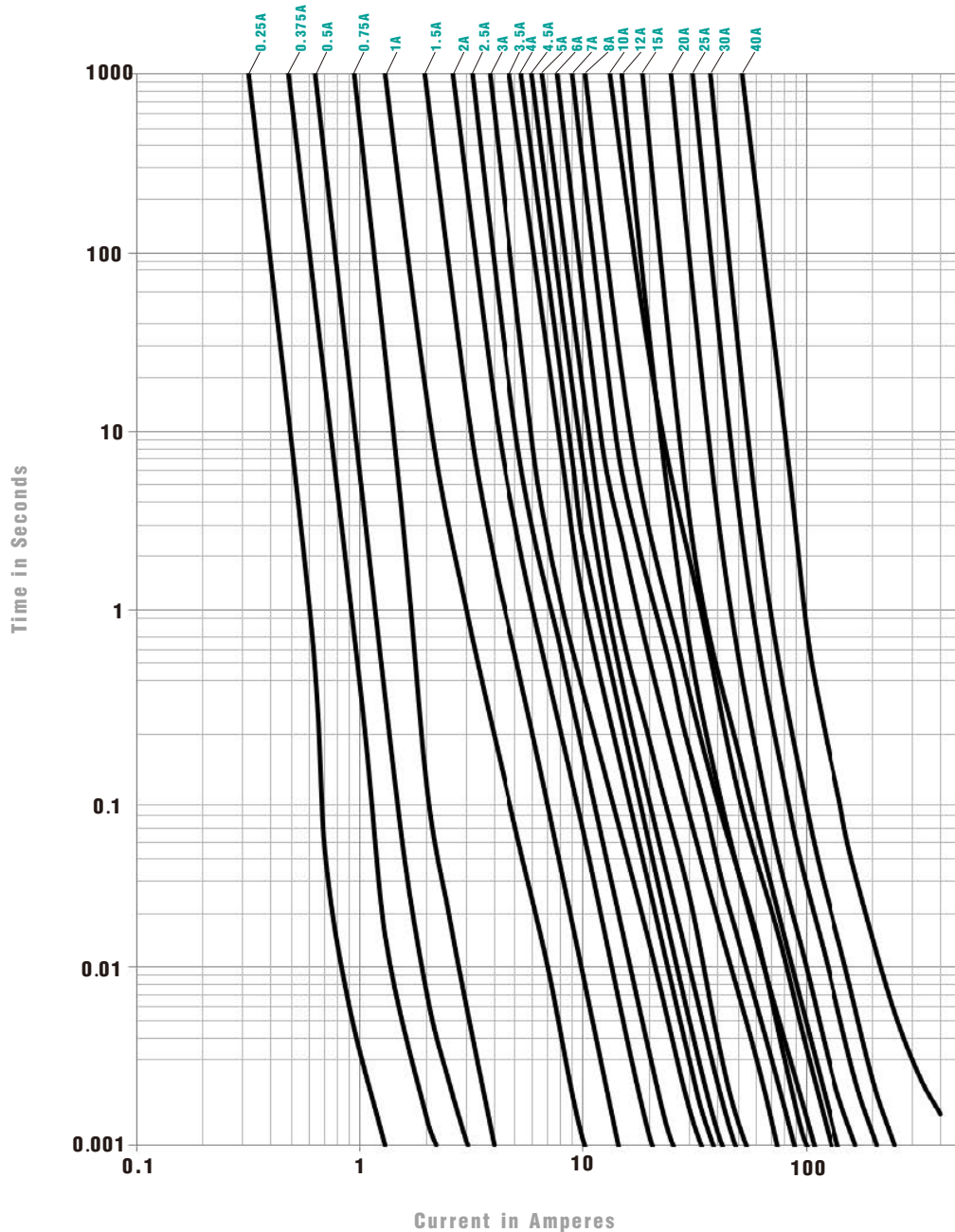
- Normal ambient temperature: 23+/-3 C
- Operating temperature: -55 ~ 150 C , with proper correction factor applied

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Average Time Current Curves



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