

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.

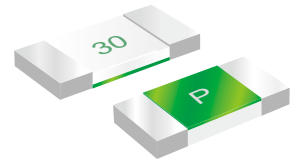


Features

- 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

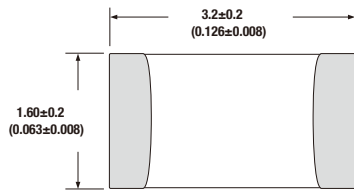
Part Number	Ampere Rating (A)	Voltage Rating	Interrupting Rating	Typical Cold Resistance (Ohms)	Typical Melting I ² t (A ² Sec)	Typical Voltage Drop (V)	Marking Code
1206FA-R250	0.250	72Vdc @ 50A 63Vdc @ 50A 32Vdc @ 150A 24Vdc @ 300A		3.608	0.0004	1.407	.25
1206FA-R375	0.375			1.882	0.0008	0.718	E
1206FA-R500	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.

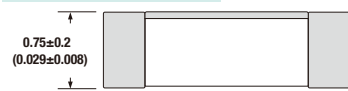
Fast Acting | 0.126x0.064 inch

Thick Film Chip Fuses 1206FA Series

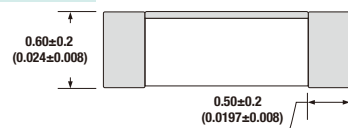
Dimension Unit: mm/inch



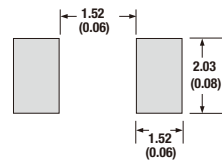
250mA-750mA/20A-40A



1A-15A



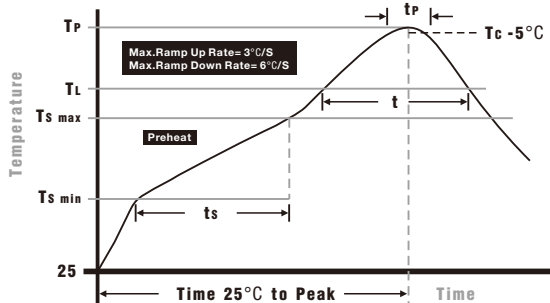
Pad layout



Packaging

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

Soldering Parameters

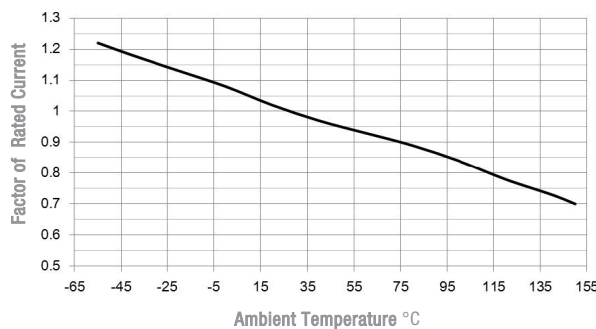


Wave Soldering: 260°C, 10 seconds max.
Infrared Reflow: 260°C, 30 seconds max.

IR Reflow Profile

Preheat Heat	
Temperature min (T _{sm})	150°C
Temperature max (T _{sm})	200°C
Time (T _{sm} to T _{sm}) (t _s)	60 - 120 seconds
Average ramp-up rate (T_{sm} 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_{sm})	
	6°C/second max.
Time 25 °C to peak temperature	
	8 minutes max.

Temperature Derating Curve



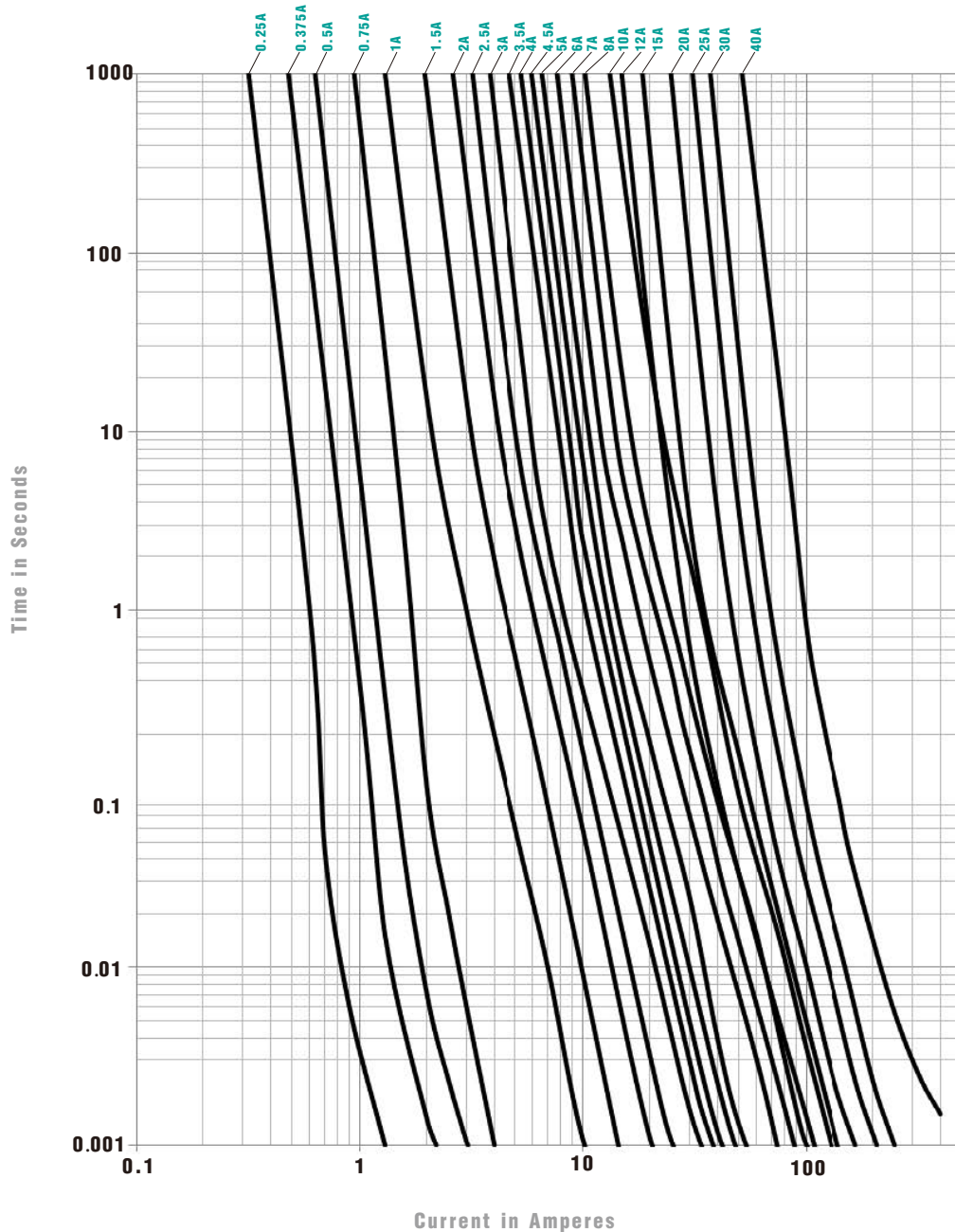
- Normal ambient temperature: 23+/-3 C
- Operating temperature: -55 ~ 150 C, with proper correction factor applied

Fast Acting | 0.126x0.064 inch

Thick Film Chip Fuses

1206FA Series

Average Time Current Curves



© 2021 PROSEMI Inc. All Rights Reserved. Specifications and features are subject to change without notice. www.prosemitech.com

The PROSEMI logo, and all other PROSEMI trademarks are the property of PROSEMI Inc. All other trademarks are the property of their respective owners.