

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

1206FA-xxxD Series



1206FA-xxxD 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

- · High inrush current withstanding capability
- AEC-Q200 Automotive Grade Certified
- · Compatible with reflow and wave solder
- · Ceramic and glass construction Excellent
- environmental integrity
- One time positive disconnect
- Lead Free and Halogen free material



Appications

- 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 |
|------------|-----------------|----------------|
| 20~30A | 100% | 4 Hours Min. |
| 20~30A | 350% | 5 Seconds Max. |
| 20~30A | 1000% | 0.2ms~20ms |

Specification

| Part Number | Ampere Rating (A) | Ũ | terrupting ting | Typical Cold Resistance (Ohms) | Typical Melting I ² t (A ² Sec) | Typical Voltage Drop (V) | Marking Code |
|----------------|-------------------------|----------------------------------|--------------------|--------------------------------------|---|--------------------------------|-----------------|
| 1206FA-20AD | 20.0 | _ 32Vdc @ 150A - 24Vdc @ 300A | | 0.0034 | 45 | 0.080 | Q |
| 1206FA-25AD | 25.0 | | | 0.0016 | 54 | 0.090 | L |
| 1206FA-30AD | 30.0 | | | 0.0013 | 90 | 0.090 | Z |

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

 $^\circ$ DC cold resistance are measured at <10% of rated current in ambient temperature of 25 $\rm C$ $_\circ$ Typical Pre-arcing I²t are measured at 10ln Current

Choice fuse for surge application (USB charger etc.), make sure the ${\rm I}^2 t$ of fuse is 4 times than surge.

Specifications are subject to change without notice. Application testing is strongly recommended.

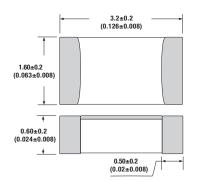


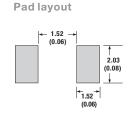
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Dimension

Unit: mm/inch

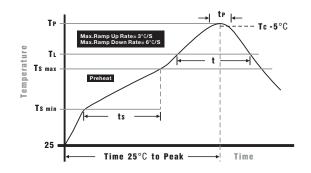




Packaging

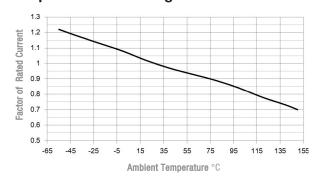
- Quantity: 3,000pcs
- 8mm wide tape on 178mm(7 inch) diameter reel -specification EIA Standard 481.

Soldering Parameters



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

| IR Reflow Profile | | | | |
|---|-----------------------------------|--|--|--|
| Preheat Heat Temperature min (Tsmin) Temperature max(Tsmax) Time (Tsmin to Tsmax) (ts) | 150°C 200°C 60 -120 seconds | | | |
| Average ramp-up rate (Tsmax to Tp) | 3°C/second max. | | | |
| Liquidous temperature (TL) Time at liquidous (tL) | 217°C 60 - 150 seconds | | | |
| Peak temperature(Tp) | 260+0/-5°C | | | |
| Time within 5°C of actual peak Temperature (tp) | 10 – 30 seconds | | | |
| Average ramp-down rate (Tp to Tsmax) | 6°C/second max. | | | |
| Time 25 °C to peak temperature | 8 minutes max. | | | |



Temperature Derating Curve

 \circ Normal ambient temperature: 23+/-3 $\rm \ddot{C}$ \circ Operating temperature: -55 \sim 150 $\rm \ddot{C}$, with proper correction factor applied

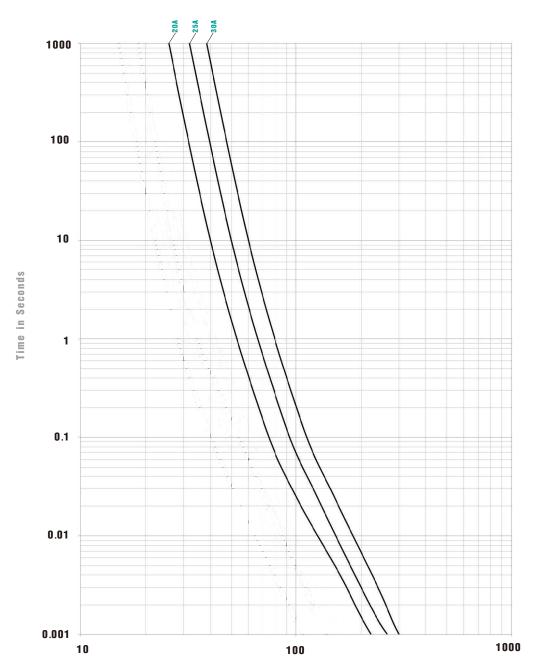
IR Reflow Profile



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Average Time Current Curves



Current in Amperes

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