



# 产品规格书

## PRODUCT SPECIFICATION

|                                |                  |
|--------------------------------|------------------|
| 客户名称:<br>CUSTOMER:             |                  |
| 产品名称:<br>PRODUCT NAME:         | 贴片保险丝            |
| 产品描述:<br>Product description:  | 1206 贴片保险丝 慢断 编带 |
| 型号/规格:<br>Model/specification: | 1206T 1.5A 32V   |
| 料号:<br>PN:                     |                  |
| 日期:<br>Date:                   | 2025年03月03日      |

| 供应商-泓达<br>Supplier- Hongda |     | 确认合格章<br>Confirm qualified Signet | 客户<br>Customer | 零件承认章<br>Approval Signet |
|----------------------------|-----|-----------------------------------|----------------|--------------------------|
| 编制<br>PREPARED             | 李红  |                                   |                |                          |
| 审核<br>CHECKED              | 鲜春  |                                   |                |                          |
| 批准<br>APPROVED             | 孙嘉利 |                                   |                |                          |



1206 Time Delay SMD Fuses

1206T Series



## Description

1206T 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.



| Rated Current | Electrical Characteristics |              |            |               |            |              |
|---------------|----------------------------|--------------|------------|---------------|------------|--------------|
|               | 1.0In                      | 2.0In        | 2.5In      | 3.0In         | 3.5In      | 10.0In       |
| 0.63A~3A      | 4 hour min.                | 1sec – 60sec | 5 sec max. | 0.1sec – 3sec | -          | 0.2ms – 20ms |
| 3.5~5A        | 4 hour min                 | -            | 5 sec max  | 0.1sec – 3sec | -          | 0.2ms – 20ms |
| 6A~30A        | 4 hour min.                | -            | -          | -             | 5 sec max. | 0.2ms – 20ms |

## 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

## Specifications

| Specification |                                  |                   |                                                                  |                                              |                           |                                                                       |            |
|---------------|----------------------------------|-------------------|------------------------------------------------------------------|----------------------------------------------|---------------------------|-----------------------------------------------------------------------|------------|
| Part No.      | Rated Voltage                    | Rated Current (A) | Breaking Capacity (A) <sup>1</sup>                               | Typical Cold Resistance (mOhms) <sup>2</sup> | Typical Voltage Drop (mV) | Typical Pre-Arcing I <sup>2</sup> t (A <sup>2</sup> Sec) <sup>3</sup> | Alpha Mark |
|               | DC                               |                   |                                                                  |                                              |                           |                                                                       |            |
|               |                                  |                   |                                                                  |                                              |                           |                                                                       |            |
| 1206T630mA    | 125V<br>72V<br>63V<br>32V<br>24V | 0.63A             | 50A@125Vdc<br>50A@72Vdc<br>50A@63Vdc<br>150A@32Vdc<br>300A@24Vdc | 1080                                         | 950                       | 0.009                                                                 | B          |
| 1206T750mA    |                                  | 0.75A             |                                                                  | 850                                          | 900                       | 0.01                                                                  | .75        |
| 1206T1A       |                                  | 1A                |                                                                  | 480                                          | 510                       | 0.11                                                                  | H          |
| 1206T1.25A    |                                  | 1.25A             |                                                                  | 330                                          | 500                       | 0.15                                                                  | H          |
| 1206T1.5A     |                                  | 1.5A              |                                                                  | 230                                          | 465                       | 0.17                                                                  | K          |
| 1206T1.75A    |                                  | 1.75A             |                                                                  | 180                                          | 450                       | 0.20                                                                  | E          |
| 1206T2A       |                                  | 2A                |                                                                  | 135                                          | 316                       | 0.41                                                                  | N          |
| 1206T2.5A     |                                  | 2.5A              |                                                                  | 75                                           | 240                       | 0.68                                                                  | O          |
| 1206T3A       |                                  | 3A                |                                                                  | 47                                           | 187                       | 1.5                                                                   | P          |
| 1206T3.5A     | 72V<br>63V<br>32V<br>24V         | 3.5A              |                                                                  | 38                                           | 180                       | 2                                                                     | R          |
| 1206T4A       |                                  | 4A                |                                                                  | 34                                           | 173                       | 2.5                                                                   | S          |
| 1206T4.5A     |                                  | 4.5A              |                                                                  | 29                                           | 164                       | 2.65                                                                  | X          |



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|          |                          |     |                                        |      |     |     |   |
|----------|--------------------------|-----|----------------------------------------|------|-----|-----|---|
| 1206T5A  | 72V<br>63V<br>32V<br>24V | 5A  | 50A@72Vdc<br>50A@63VDC                 | 24   | 145 | 4   | T |
| 1206T6A  |                          | 6A  | 150A@32Vdc<br>300A@24Vdc               | 16   | 140 | 12  | F |
| 1206T7A  |                          | 7A  |                                        | 12.3 | 130 | 14  | 7 |
| 1206T8A  | 48V<br>32V<br>24V        | 8A  | 150A@48Vdc<br>150A@32Vdc<br>300A@24Vdc | 8.3  | 123 | 16  | M |
| 1206T10A |                          | 10A |                                        | 6.5  | 110 | 22  | U |
| 1206T12A |                          | 12A |                                        | 5.3  | 80  | 40  | W |
| 1206T15A |                          | 15A |                                        | 4.5  | 85  | 45  | Y |
| 1206T20A |                          | 20A |                                        | 3.4  | 80  | 50  | Q |
| 1206T25A |                          | 25A |                                        | 1.6  | 90  | 60  | L |
| 1206T30A | 32V<br>24V               | 30A | 200A@32Vdc<br>200A@24Vdc               | 1.3  | 90  | 100 | Z |

1. DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)
  2. DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25℃
  3. Typical Pre-arcing  $I^2t$  are measured at 10In Current  
Choice fuse for surge application (USB charger etc.), make sure the  $I^2t$  of fuse is 4 times than surge.
  4. 1206T12A&15A are higher  $I^2t$  version than 1206T12&15.
- Specifications are subject to change without notice. Application testing is strongly recommended.



1206 Time Delay SMD Fuses

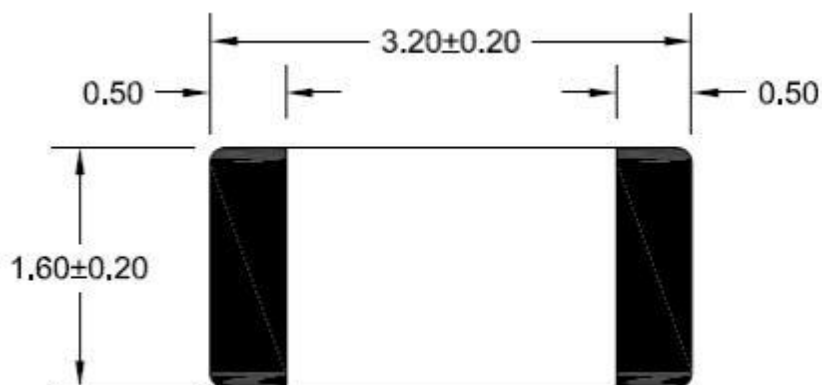
1206T Series



## Dimension

Drawing not to scale (Unit: mm)

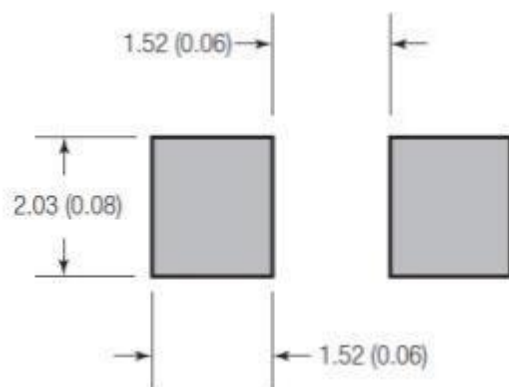
Top view



Side view



Recommended land pattern

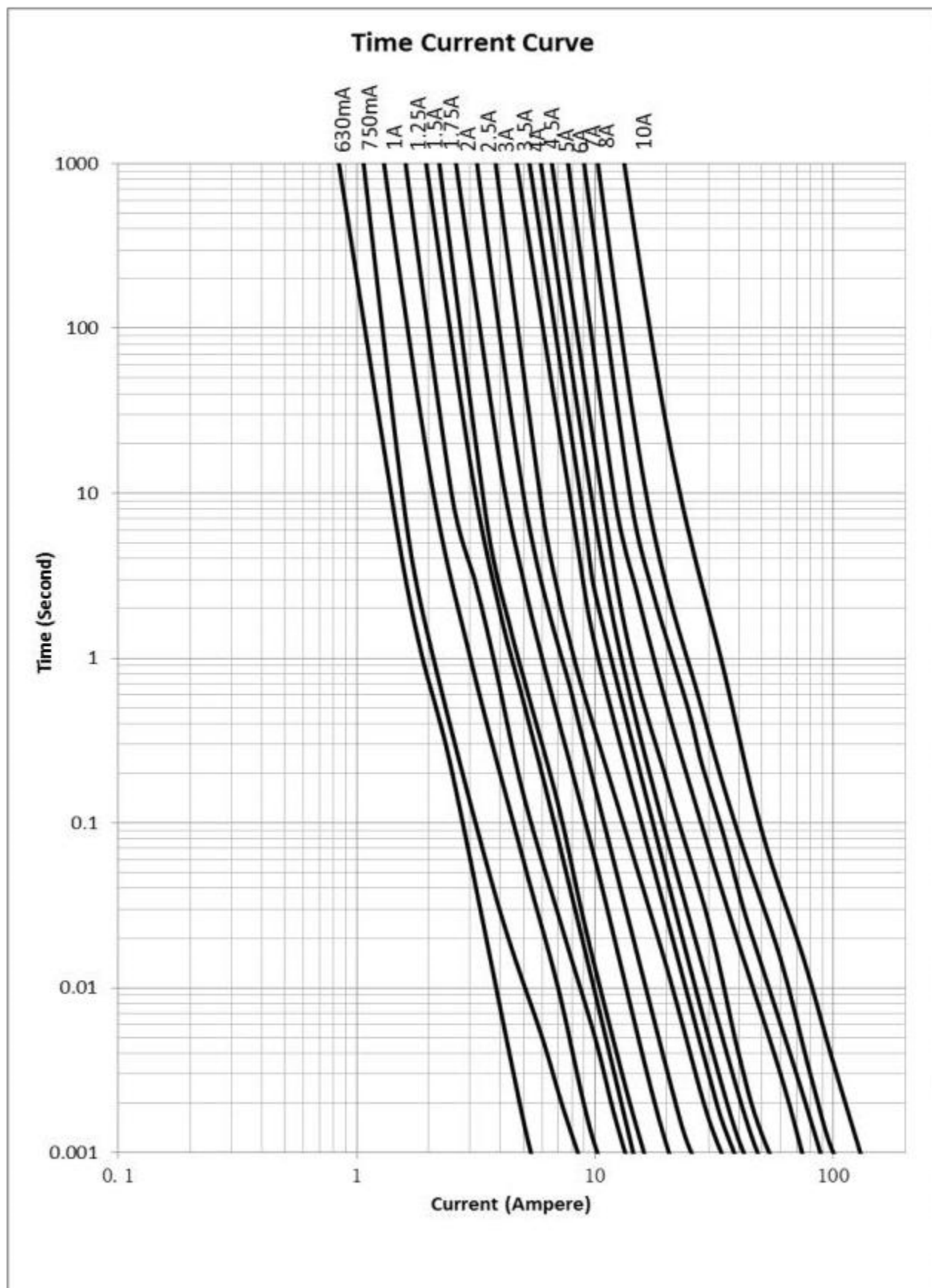


Unit: mm(inch)



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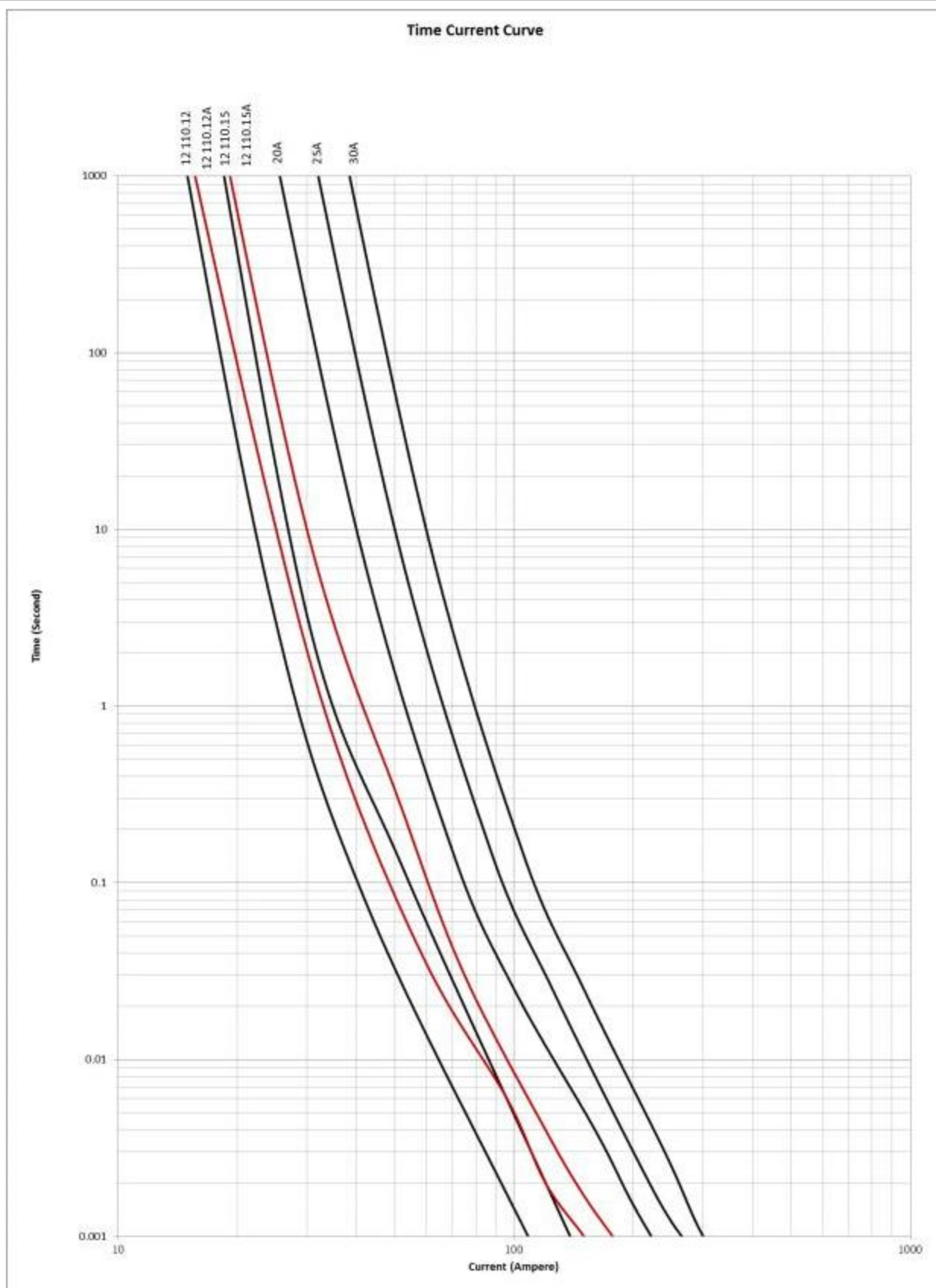
1206T Series





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## 1206 Time Delay SMD Fuses

### 1206T Series



## General specifications

Operating temperature: -55 °C to +125 °C (with derating)

Thermal shock: MIL- STD- 202G, Method 107, (300 cycles -55 °C to +125 °C)

Vibration: MIL-STD- 202G, Method 204, (20 g's for 20 minutes, 12 cycles in each of 3 orientations, 10- 2000 Hz)

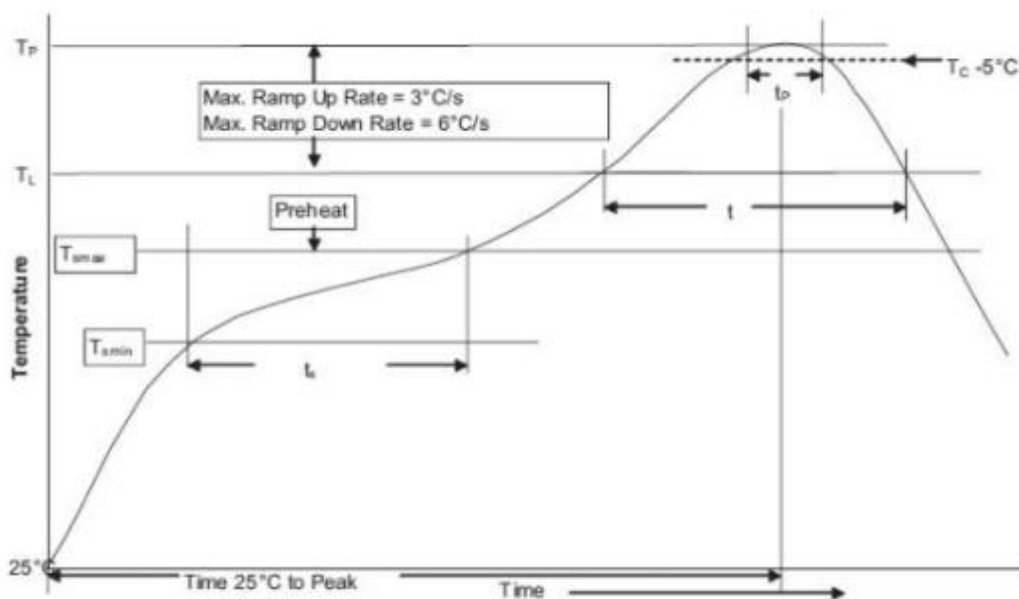
Humidity: MIL- STD- 202G, Method 103, (+85 °C, 85% relative humidity, 1000 hours 10% of operating power)

Mechanical shock: MIL-STD- 202G, Method 213, Condition C

## Soldering method

- Wave solder
  - Reservoir temperature: 260 °C
  - Time in reservoir: 10 seconds maximum
- Infrared reflow
  - Temperature: 260 °C
  - Time: 30 seconds maximum

## Solder reflow profile



| Profile Feature                                                                                 |                                                                  | Lead(Pb) free solder |
|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------|----------------------|
| Preheat and soak                                                                                | ● Temperature min.(T <sub>min</sub> )                            | 150 °C               |
|                                                                                                 | ● Temperature max. (T <sub>max</sub> )                           | 200 °C               |
|                                                                                                 | ● Time (T <sub>min</sub> to T <sub>max</sub> ) (t <sub>S</sub> ) | 60 - 120 Seconds     |
| Average ramp up rate T <sub>max</sub> to T <sub>P</sub>                                         |                                                                  | 3 °C / Second Max.   |
| Liquidous temperature (T <sub>L</sub> )                                                         |                                                                  | 217 °C               |
| Time at liquidous (t <sub>L</sub> )                                                             |                                                                  | 60 - 150 Seconds     |
| Peak package body temperature (T <sub>P</sub> )                                                 |                                                                  | 260 °C               |
| Time (t <sub>P</sub> ) within 5°C of the specified classification temperature (T <sub>C</sub> ) |                                                                  | 30 Seconds           |
| Average ramp- down rate ( T <sub>P</sub> to T <sub>max</sub> )                                  |                                                                  | 6 °C / Second Max.   |
| Time (25°C to Peak Temperature)                                                                 |                                                                  | 8 Minutes Max.       |



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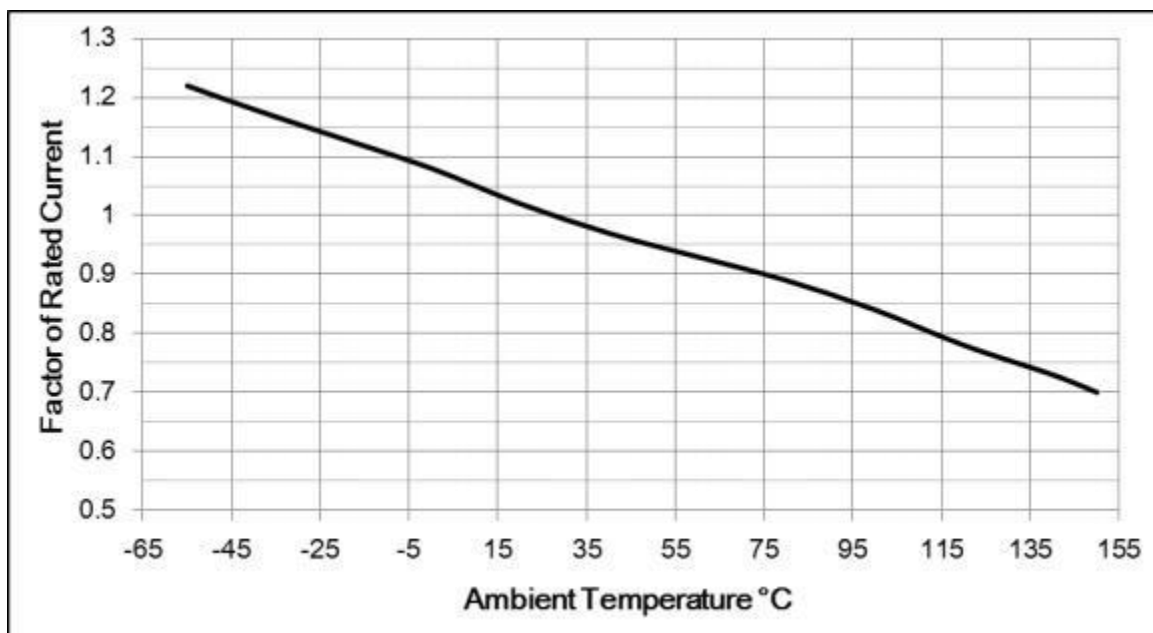
1206T Series



## Temperature Derating Curve

Normal ambient temperature: 23+/-3℃

Operating temperature: -55 ~ 150℃, with proper correction factor applied



## Package

3000 fuses on 8mm tape-and-reel on a 7 inch (178mm) reel per EIA Standard 481.

--- End of Document ---