

## ➤ Description

BSMD0402CT Series are the Time-Lag 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

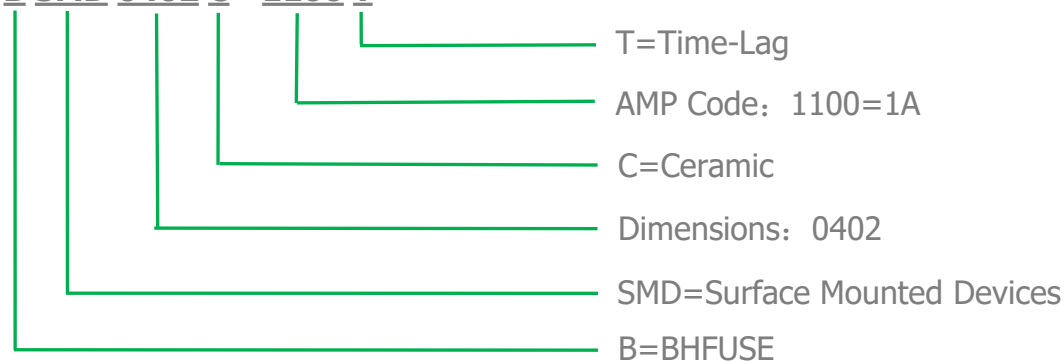
- Excellent environmental integrity
- Compatible with reflow and wave solder
- One time positive disconnect
- Lead Free and Halogen free material

## ➤ Electrical Characteristics

| Rated Current | 1.0In      | 2.5In     | 3.5In     |
|---------------|------------|-----------|-----------|
| 0.2A-0.75A    | 4 hour min | -         | 5 sec max |
| 1A-4A         | 4 hour min | 5 sec max | -         |

## ➤ Part Number System

**B SMD 0402 C - 1100 T**



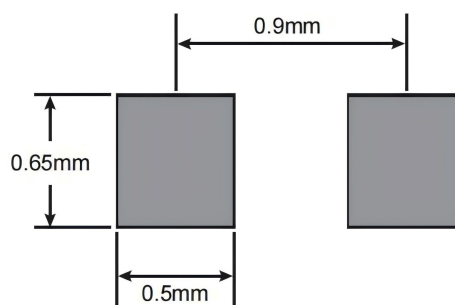
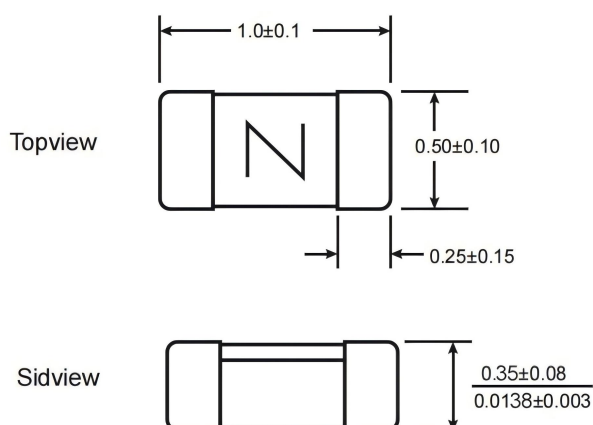
## ➤ Electrical Specifications

| Part Number     | Rated Current (A) | Rated Voltage DG | Breaking Capacity | Typical Cold. Resistance (mΩ) | Typical Pre-Arcing I <sup>2</sup> t (A <sup>2</sup> sec) |
|-----------------|-------------------|------------------|-------------------|-------------------------------|----------------------------------------------------------|
| BSMD0402C-0200T | 0.20              | 32V              | 35A               | 2250                          | 0.0006                                                   |
| BSMD0402C-0250T | 0.25              |                  |                   | 1500                          | 0.0010                                                   |
| BSMD0402C-0315T | 0.315             |                  |                   | 1000                          | 0.0014                                                   |
| BSMD0402C-0375T | 0.375             |                  |                   | 780                           | 0.0018                                                   |
| BSMD0402C-0500T | 0.50              |                  |                   | 500                           | 0.0043                                                   |
| BSMD0402C-0750T | 0.75              |                  |                   | 220                           | 0.0110                                                   |
| BSMD0402C-1100T | 1.00              |                  |                   | 130                           | 0.040                                                    |
| BSMD0402C-1125T | 1.25              |                  |                   | 100                           | 0.048                                                    |
| BSMD0402C-1150T | 1.50              |                  |                   | 78                            | 0.060                                                    |
| BSMD0402C-1200T | 2.00              |                  |                   | 40                            | 0.130                                                    |
| BSMD0402C-1250T | 2.50              |                  |                   | 24                            | 0.200                                                    |
| BSMD0402C-1300T | 3.00              |                  |                   | 18                            | 0.330                                                    |
| BSMD0402C-1350T | 3.50              |                  |                   | 14                            | 0.450                                                    |
| BSMD0402C-1400T | 4.00              |                  |                   | 11                            | 0.600                                                    |

### Notes:

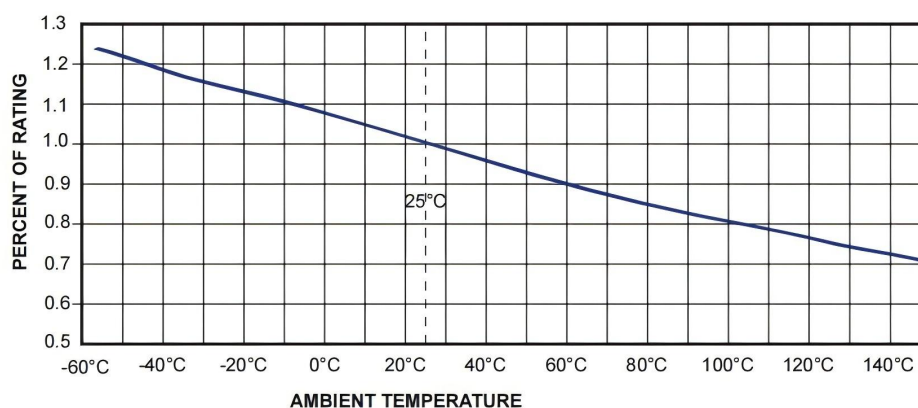
- 1、DC interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source) ;
- 2、DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25°C ;
- 3、Typical Melting I<sup>2</sup>t (Measured with a battery bank at rated DC voltage, Measured at 1ms open time, time constant of calibrated circuit less than 50 microseconds).

## ➤ Dimensions (mm)

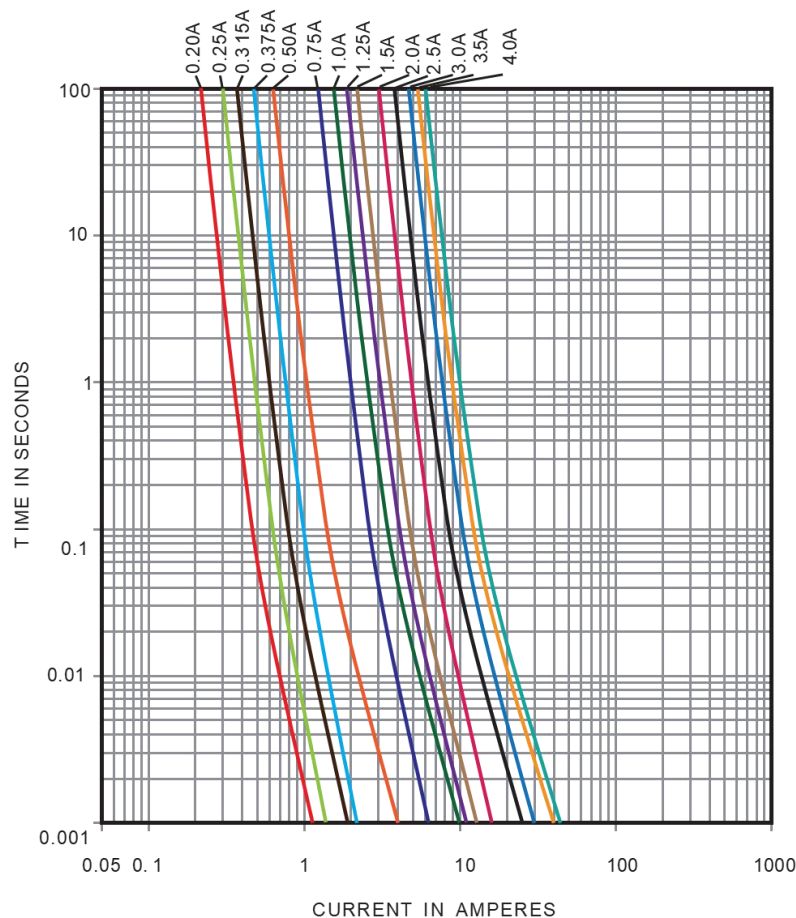


Print solder in thickness of 0.08mm to 0.10mm

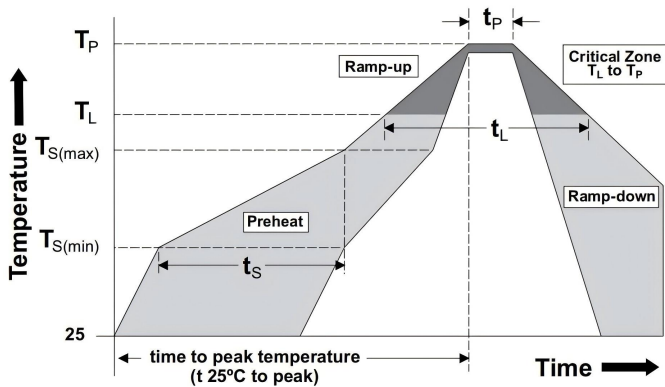
## ➤ Average Time-Current Curves



## ➤ Temperature Derating Curve



## ➤ Soldering Parameters



| Soldering Method |                       | Parameter  |
|------------------|-----------------------|------------|
| Wave Solder      | Reservoir Temperature | 260°C      |
|                  | Time in Reservoir     | 10 sec max |
| Infrared Reflow  | Temperature           | 260°C      |
|                  | Time                  | 30 sec max |

| Profile Feature                                |                                       | Pb-Free Assembly |
|------------------------------------------------|---------------------------------------|------------------|
| Average Ramp-Up Rate ( $T_{s(max)}$ to $T_P$ ) |                                       | 3°C/sec max      |
| Preheat                                        | -Temperature Min( $T_{s(min)}$ )      | 150°C            |
|                                                | -Temperature Max( $T_{s(max)}$ )      | 200°C            |
|                                                | -Time( $T_{s(min)}$ to $T_{s(max)}$ ) | 60~120 sec       |
| Reflow                                         | -Temperature( $T_L$ )                 | 217°C            |
|                                                | -Time( $t_L$ )                        | 60~150 sec       |
| Peak Temperature ( $T_P$ )                     |                                       | 260°C            |
| Ramp-Down Rate                                 |                                       | 6°C/sec max      |
| Time 25°C to Peak Temperature                  |                                       | 8 min max        |

### Notes:

- 1、Normal ambient temperature: 23+/-3°C ;
- 2、Operating temperature: -55 ~ 150°C, with proper correction factor applied.

## ➤ Packing

| Part Number       | Quantity & Packaging Code                                                         |
|-------------------|-----------------------------------------------------------------------------------|
| BSMD0402CT Series | 10000 pcs/reel<br>8mm tape-and-reel on a 7 inch (178mm) reel per EIA Standard 481 |

## ➤ Others

1. If in use beyond the requirements of the specifications, must pass through the mutual confirmation !
2. If the specification is not appropriate, must through consultation between the two sides and by the company to modify.
3. It could be in conformance with another file which made by our company.