

## ***Data Sheet***

Customer: \_\_\_\_\_

Product:   Resettable Fuse (PPTC).   SMD Type \_\_\_\_\_

Size :       0603/0805/1206/1210/1812/2920 \_\_\_\_\_

Issued Date: 15-Apr.-2016 \_\_\_\_\_

Edition:    Ver. 2 \_\_\_\_\_

### Record of change

| Date         | Ver. | Description   | Page |
|--------------|------|---------------|------|
| 10-Jun.-2015 | 1    |               |      |
| 15-Apr-2016  | 2    | Updated spec. |      |
|              |      |               |      |
|              |      |               |      |

## **HITANO ENTERPRISE CORP.**

7F-7, No. 3, Wu Chuan 1<sup>st</sup> Road, New Taipei Industrial Park,  
New Taipei City, TAIWAN, R.O.C.

Tel: +886 2 2299 1331 (Rep.)

Fax: +886 2 2298 2466, 2298 2969

| Prepared by            | Checked by           | Approved by          | Accepted by (customer) |
|------------------------|----------------------|----------------------|------------------------|
| 10-Jun.-2015           | 10-Jun.-2015         | 10-Jun.-2015         |                        |
| <i><b>Andy Hsu</b></i> | <i><b>Hwa Wu</b></i> | <i><b>Hwa Wu</b></i> |                        |

# RESETTABLE FUSE (PPTC)

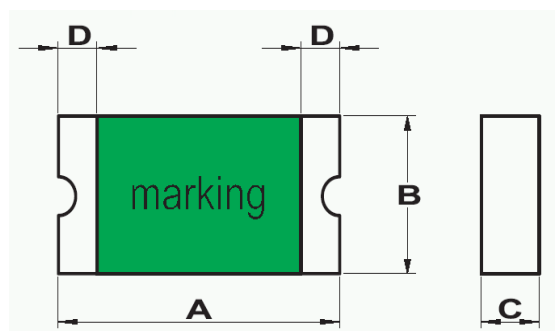
## Features

- Suitable for lead free soldering.
- Compatible with flow and reflow soldering

## Applications

- Consumer Electronics
- USB hub, M/B, Modem
- PDAs & Charger
- Analog & digital line card.
- Digital camera, Disk drivers, CD-ROMs

## Construction & Dimension



Unit:mm

Terminal Pad Material :  
Tin-plated Nickel-Copper

| Model      | A    |      | B    |      | C    |      | D    |
|------------|------|------|------|------|------|------|------|
|            | Min. | Max. | Min. | Max. | Min. | Max. | Min. |
| 0603SMD005 | 1.45 | 1.85 | 0.65 | 1.05 | 0.40 | 1.00 | 0.15 |
| 0603SMD010 | 1.45 | 1.85 | 0.65 | 1.05 | 0.40 | 1.00 | 0.15 |
| 0603SMD020 | 1.45 | 1.85 | 0.65 | 1.05 | 0.40 | 1.00 | 0.15 |
| 0603SMD025 | 1.45 | 1.85 | 0.65 | 1.05 | 0.40 | 1.00 | 0.15 |
| 0603SMD035 | 1.45 | 1.85 | 0.65 | 1.05 | 0.40 | 1.00 | 0.15 |
| 0603SMD050 | 1.45 | 1.85 | 0.65 | 1.05 | 0.50 | 1.00 | 0.15 |
| 0603SMD075 | 1.45 | 1.85 | 0.65 | 1.05 | 0.50 | 1.00 | 0.15 |

Package : 5,000pcs/reel

| Model      | A    |      | B    |      | C    |      | D    |
|------------|------|------|------|------|------|------|------|
|            | Min. | Max. | Min. | Max. | Min. | Max. | Min. |
| 0805SMD010 | 2.00 | 2.20 | 1.20 | 1.50 | 0.50 | 1.00 | 0.20 |
| 0805SMD020 | 2.00 | 2.20 | 1.20 | 1.50 | 0.45 | 1.00 | 0.20 |
| 0805SMD035 | 2.00 | 2.20 | 1.20 | 1.50 | 0.45 | 1.00 | 0.20 |
| 0805SMD050 | 2.00 | 2.20 | 1.20 | 1.50 | 0.30 | 0.60 | 0.20 |
| 0805SMD075 | 2.00 | 2.20 | 1.20 | 1.50 | 0.65 | 1.25 | 0.20 |
| 0805SMD100 | 2.00 | 2.20 | 1.20 | 1.50 | 1.80 | 1.80 | 0.20 |
| 0805SMD110 | 2.00 | 2.20 | 1.20 | 1.50 | 0.50 | 1.20 | 0.20 |

Package : 010~050 5,000pcs/reel, 075~110 4,000pcs/reel

# RESETTABLE FUSE (PPTC)

| Model           | A    |      | B    |      | C    |      | D    |
|-----------------|------|------|------|------|------|------|------|
|                 | Min. | Max. | Min. | Max. | Min. | Max. | Min. |
| 1206SMD005      | 3.00 | 3.50 | 1.50 | 1.80 | 0.60 | 1.10 | 0.15 |
| 1206SMD010      | 3.00 | 3.50 | 1.50 | 1.80 | 0.60 | 1.10 | 0.15 |
| 1206SMD012      | 3.00 | 3.50 | 1.50 | 1.80 | 0.60 | 1.10 | 0.15 |
| 1206SMD025      | 3.00 | 3.50 | 1.50 | 1.80 | 0.40 | 0.90 | 0.15 |
| 1206SMD035      | 3.00 | 3.50 | 1.50 | 1.80 | 0.50 | 1.20 | 0.15 |
| 1206SMD050      | 3.00 | 3.50 | 1.50 | 1.80 | 0.50 | 1.20 | 0.15 |
| 1206SMD050/13.2 | 3.00 | 3.50 | 1.50 | 1.80 | 0.50 | 1.20 | 0.15 |
| 1206SMD075      | 3.00 | 3.50 | 1.50 | 1.80 | 0.50 | 1.20 | 0.15 |
| 1206SMD100      | 3.00 | 3.50 | 1.50 | 1.80 | 0.50 | 1.20 | 0.15 |
| 1206SMD110      | 3.00 | 3.50 | 1.50 | 1.80 | 0.40 | 0.80 | 0.15 |
| 1206SMD150      | 3.00 | 3.50 | 1.50 | 1.80 | 0.50 | 1.20 | 0.15 |
| 1206SMD200      | 3.00 | 3.50 | 1.50 | 1.80 | 0.50 | 1.20 | 0.15 |

Package : 005~012, 50/13.2, 150,200 : 3,500pcs/reel, 025~050, 075~100 : 5,000pcs/reel

| Model      | A    |      | B    |      | C    |      | D    |
|------------|------|------|------|------|------|------|------|
|            | Min. | Max. | Min. | Max. | Min  | Max. | Min. |
| 1210SMD005 | 3.00 | 3.43 | 2.35 | 2.80 | 0.40 | 0.90 | 0.30 |
| 1210SMD010 | 3.00 | 3.43 | 2.35 | 2.80 | 0.40 | 0.90 | 0.30 |
| 1210SMD020 | 3.00 | 3.43 | 2.35 | 2.80 | 0.40 | 0.90 | 0.30 |
| 1210SMD035 | 3.00 | 3.43 | 2.35 | 2.80 | 0.40 | 0.90 | 0.30 |
| 1210SMD050 | 3.00 | 3.43 | 2.35 | 2.80 | 0.40 | 0.90 | 0.30 |
| 1210SMD075 | 3.00 | 3.43 | 2.35 | 2.80 | 0.40 | 0.90 | 0.30 |
| 1210SMD110 | 3.00 | 3.43 | 2.35 | 2.80 | 0.40 | 0.90 | 0.30 |
| 1210SMD150 | 3.00 | 3.43 | 2.35 | 2.80 | 0.50 | 1.20 | 0.30 |
| 1210SMD175 | 3.00 | 3.43 | 2.35 | 2.80 | 0.50 | 1.20 | 0.30 |
| 1210SMD200 | 3.00 | 3.43 | 2.35 | 2.80 | 0.50 | 1.20 | 0.30 |

Package : 050, 075 : 4,000pcs/reel, The others : 4,500pcs/reel

# RESETTABLE FUSE (PPTC)

| Model         | A    |      | B    |      | C    |      | D    |
|---------------|------|------|------|------|------|------|------|
|               | Min. | Max. | Min. | Max. | Min. | Max. | Max. |
| 1812SMD010    | 4.37 | 4.73 | 3.07 | 3.41 | 0.50 | 1.00 | 0.25 |
| 1812SMD014    | 4.37 | 4.73 | 3.07 | 3.41 | 0.50 | 1.00 | 0.25 |
| 1812SMD020    | 4.37 | 4.73 | 3.07 | 3.41 | 0.50 | 1.30 | 0.25 |
| 1812SMD030    | 4.37 | 4.73 | 3.07 | 3.41 | 0.50 | 1.30 | 0.25 |
| 1812SMD050    | 4.37 | 4.73 | 3.07 | 3.41 | 0.40 | 0.90 | 0.25 |
| 1812SMD050/33 | 4.37 | 4.73 | 3.07 | 3.41 | 0.60 | 1.30 | 0.25 |
| 1812SMD075    | 4.37 | 4.73 | 3.07 | 3.41 | 0.40 | 0.90 | 0.25 |
| 1812SMD075/16 | 4.37 | 4.73 | 3.07 | 3.41 | 0.40 | 0.90 | 0.25 |
| 1812SMD075/24 | 4.37 | 4.73 | 3.07 | 3.41 | 0.60 | 1.30 | 0.25 |
| 1812SMD110    | 4.37 | 4.73 | 3.07 | 3.41 | 0.40 | 0.90 | 0.25 |
| 1812SMD110/16 | 4.37 | 4.73 | 3.07 | 3.41 | 0.60 | 1.30 | 0.25 |
| 1812SMD125    | 4.37 | 4.73 | 3.07 | 3.41 | 0.60 | 1.30 | 0.25 |
| 1812SMD150    | 4.37 | 4.73 | 3.07 | 3.41 | 0.40 | 0.90 | 0.25 |
| 1812MD150/16  | 4.37 | 4.73 | 3.07 | 3.41 | 0.60 | 1.30 | 0.25 |
| 1812SMD160    | 4.37 | 4.73 | 3.07 | 3.41 | 0.40 | 0.90 | 0.25 |
| 1812SMD200    | 4.37 | 4.73 | 3.07 | 3.41 | 0.60 | 1.30 | 0.25 |
| 1812SMD260    | 4.37 | 4.73 | 3.07 | 3.41 | 0.60 | 1.30 | 0.25 |
| 1812SMD300    | 4.37 | 4.73 | 3.07 | 3.41 | 0.50 | 1.30 | 0.25 |
| 1812SMD350    | 4.37 | 4.73 | 3.07 | 3.41 | 0.60 | 1.30 | 0.25 |

\* Package : 1,500pcs/reel

| Model         | A    |      | B    |      | C    |      | D    |
|---------------|------|------|------|------|------|------|------|
|               | Min. | Max. | Min. | Max. | Min. | Max. | Min. |
| 2920SMD030    | 6.73 | 7.98 | 4.80 | 5.44 | 0.60 | 1.15 | 0.30 |
| 2920SMD050    | 6.73 | 7.98 | 4.80 | 5.44 | 0.60 | 1.15 | 0.30 |
| 2920SMD075    | 6.73 | 7.98 | 4.80 | 5.44 | 0.60 | 1.15 | 0.30 |
| 2920SMD100    | 6.73 | 7.98 | 4.80 | 5.44 | 0.50 | 1.30 | 0.30 |
| 2920SMD125    | 6.73 | 7.98 | 4.80 | 5.44 | 0.50 | 1.30 | 0.30 |
| 2920SMD150/16 | 6.73 | 7.98 | 4.80 | 5.44 | 0.50 | 1.30 | 0.30 |
| 2920SMD150/33 | 6.73 | 7.98 | 4.80 | 5.44 | 0.50 | 1.30 | 0.30 |
| 2920SMD185    | 6.73 | 7.98 | 4.80 | 5.44 | 0.50 | 1.30 | 0.30 |
| 2920SMD200/16 | 6.73 | 7.98 | 4.80 | 5.44 | 0.50 | 1.30 | 0.30 |
| 2920SMD200/24 | 6.73 | 7.98 | 4.80 | 5.44 | 0.50 | 1.30 | 0.30 |
| 2920SMD250    | 6.73 | 7.98 | 4.80 | 5.44 | 0.50 | 1.30 | 0.30 |
| 2920SMD260/6  | 6.73 | 7.98 | 4.80 | 5.44 | 0.50 | 1.30 | 0.30 |
| 2920SMD260/16 | 6.73 | 7.98 | 4.80 | 5.44 | 0.50 | 1.30 | 0.30 |
| 2920SMD300/6  | 6.73 | 7.98 | 4.80 | 5.44 | 0.50 | 1.30 | 0.30 |
| 2920SMD300/16 | 6.73 | 7.98 | 4.80 | 5.44 | 0.50 | 1.30 | 0.30 |

package : 2,000pcs/reel

# RESETTABLE FUSE (PPTC)

## Electrical Characteristic

### Definition :

**I<sub>hold</sub>** = Hold Current. Maximum current device will not trip in 25°C still air.

**I<sub>trip</sub>** = Trip Current. Minimum current at which the device will always trip in 25°C still air.

**V<sub>max</sub>** = Maximum operating voltage device can withstand without damage at rated current (I<sub>max</sub>).

**I<sub>max</sub>** = Maximum fault current device can withstand without damage at rated voltage (V<sub>max</sub>).

**P<sub>d</sub>** = Power dissipation when device is in the tripped state in 25°C still air environment at rated voltage.

**R<sub>i min</sub>/max** = Minimum/Maximum device resistance prior to tripping at 25°C.

**R<sub>I max</sub>** = Maximum device resistance is measured one hour post reflow.

**CAUTION :** Operation beyond the specified ratings may result in damage and possible arcing and flame.

| Model      | V max<br>(Vdc) | I max<br>(Amps) | I hold<br>(Amps) | I trip<br>(Amps) | R <sub>i</sub> min<br>(Ω) | R <sub>I</sub> max<br>(Ω) | Max Time To Trip |      | P (d)<br>(Watts) |
|------------|----------------|-----------------|------------------|------------------|---------------------------|---------------------------|------------------|------|------------------|
|            |                |                 |                  |                  |                           |                           | Amps             | Sec. |                  |
| 0603SMD005 | 15.0           | 40              | 0.05             | 0.20             | 2.00                      | 10.0                      | 0.50             | 1.00 | 0.50             |
| 0603SMD010 | 15.0           | 40              | 0.10             | 0.30             | 0.90                      | 6.00                      | 0.50             | 1.00 | 0.50             |
| 0603SMD020 | 9.0            | 40              | 0.20             | 0.50             | 0.55                      | 3.50                      | 1.00             | 0.60 | 0.50             |
| 0603SMD025 | 9.0            | 40              | 0.25             | 0.55             | 0.50                      | 3.00                      | 8.00             | 0.08 | 0.50             |
| 0603SMD035 | 6.0            | 40              | 0.35             | 0.75             | 0.20                      | 1.40                      | 8.00             | 0.10 | 0.50             |
| 0603SMD050 | 6.0            | 40              | 0.50             | 1.00             | 0.10                      | 0.80                      | 8.00             | 0.10 | 0.50             |
| 0603SMD075 | 6.0            | 40              | 0.75             | 1.40             | 0.06                      | 0.45                      | 8.00             | 0.10 | 0.50             |

| Model      | V max<br>(Volts) | I max<br>(Amps) | I hold<br>(Amps) | I trip<br>(Amps) | R min<br>(Ω) | R <sub>I</sub> max<br>(Ω) | Max Time To Trip |      | P (d)<br>(Watts) |
|------------|------------------|-----------------|------------------|------------------|--------------|---------------------------|------------------|------|------------------|
|            |                  |                 |                  |                  |              |                           | Amps             | Sec. |                  |
| 0805SMD010 | 15.0             | 100             | 0.10             | 0.30             | 1.00         | 6.000                     | 0.50             | 1.50 | 0.5              |
| 0805SMD020 | 9.0              | 100             | 0.20             | 0.50             | 0.65         | 3.500                     | 8.0              | 0.02 | 0.5              |
| 0805SMD035 | 6.0              | 100             | 0.35             | 0.75             | 0.25         | 1.200                     | 8.0              | 0.10 | 0.5              |
| 0805SMD050 | 6.0              | 100             | 0.50             | 1.00             | 0.15         | 0.850                     | 8.0              | 0.10 | 0.5              |
| 0805SMD075 | 6.0              | 40              | 0.75             | 1.50             | 0.09         | 0.385                     | 8.0              | 0.20 | 0.6              |
| 0805SMD100 | 6.0              | 100             | 1.00             | 1.95             | 0.06         | 0.230                     | 8.0              | 0.30 | 0.6              |
| 0805SMD110 | 6.0              | 100             | 1.10             | 2.20             | 0.06         | 0.21                      | 8.0              | 0.30 | 0.60             |

# RESETTABLE FUSE (PPTC)

| Model           | V max<br>(Vdc) | I max<br>(Amps) | I hold<br>(Amps) | I trip<br>(Amps) | R <sub>i</sub> min<br>(Ω) | R <sub>1</sub> max<br>(Ω) | Max Time To Trip |      | P (d)<br>(Watts) |
|-----------------|----------------|-----------------|------------------|------------------|---------------------------|---------------------------|------------------|------|------------------|
|                 |                |                 |                  |                  |                           |                           | Amps             | Sec. |                  |
| 1206SMD005      | 60.0           | 100             | 0.05             | 0.15             | 3.600                     | 50.00                     | 0.25             | 1.50 | 0.40             |
| 1206SMD010      | 60.0           | 100             | 0.10             | 0.25             | 1.600                     | 15.00                     | 0.50             | 1.00 | 0.40             |
| 1206SMD012      | 60.0           | 100             | 0.12             | 0.29             | 1.600                     | 15.00                     | 0.50             | 1.00 | 0.40             |
| 1206SMD025      | 16.0           | 100             | 0.25             | 0.50             | 0.350                     | 2.500                     | 8.00             | 0.08 | 0.60             |
| 1206SMD035      | 6.00           | 100             | 0.35             | 0.75             | 0.250                     | 1.300                     | 8.00             | 0.10 | 0.60             |
| 1206SMD050      | 6.00           | 100             | 0.50             | 1.00             | 0.150                     | 0.700                     | 8.00             | 0.10 | 0.60             |
| 1206SMD050/13.2 | 6.00           | 100             | 0.50             | 1.00             | 0.150                     | 0.700                     | 8.00             | 0.10 | 0.60             |
| 1206SMD075      | 6.00           | 100             | 0.75             | 1.50             | 0.090                     | 0.500                     | 8.00             | 0.20 | 0.60             |
| 1206SMD100      | 6.00           | 100             | 1.00             | 1.80             | 0.055                     | 0.270                     | 8.00             | 0.30 | 0.60             |
| 1206SMD110      | 6.00           | 100             | 1.10             | 2.20             | 0.050                     | 0.250                     | 8.00             | 0.30 | 0.60             |
| 1206SMD150      | 6.00           | 100             | 1.50             | 3.00             | 0.040                     | 0.130                     | 8.00             | 1.00 | 0.80             |
| 1206SMD200      | 6.00           | 100             | 2.00             | 3.50             | 0.018                     | 0.080                     | 8.00             | 1.50 | 0.80             |

| Model      | V max<br>(Vdc) | I max<br>(Amps) | I hold<br>(Amps) | I trip<br>(Amps) | R <sub>i</sub> min<br>(Ω) | R <sub>1</sub> max<br>(Ω) | Max Time To Trip |      | P (d)<br>(Watts) |
|------------|----------------|-----------------|------------------|------------------|---------------------------|---------------------------|------------------|------|------------------|
|            |                |                 |                  |                  |                           |                           | Amps             | Sec. |                  |
| 1210SMD005 | 30             | 100             | 0.05             | 0.15             | 2.800                     | 50.00                     | 0.25             | 1.50 | 0.60             |
| 1210SMD010 | 30             | 100             | 0.10             | 0.30             | 0.800                     | 15.00                     | 0.50             | 0.60 | 0.60             |
| 1210SMD020 | 30             | 100             | 0.20             | 0.40             | 0.400                     | 5.000                     | 8.00             | 0.02 | 0.60             |
| 1210SMD035 | 6.0            | 100             | 0.35             | 0.75             | 0.200                     | 1.300                     | 8.00             | 0.20 | 0.60             |
| 1210SMD050 | 13.2           | 100             | 0.50             | 1.00             | 0.180                     | 0.900                     | 8.00             | 0.10 | 0.60             |
| 1210SMD075 | 6.0            | 100             | 0.75             | 1.50             | 0.070                     | 0.400                     | 8.00             | 0.10 | 0.60             |
| 1210SMD110 | 6.0            | 100             | 1.10             | 2.20             | 0.050                     | 0.210                     | 8.00             | 0.30 | 0.60             |
| 1210SMD150 | 6.0            | 100             | 1.50             | 3.00             | 0.030                     | 0.110                     | 8.00             | 0.50 | 0.60             |
| 1210SMD175 | 6.0            | 100             | 1.75             | 3.50             | 0.020                     | 0.080                     | 8.00             | 0.60 | 0.80             |
| 1210SMD200 | 6.0            | 100             | 2.00             | 4.00             | 0.015                     | 0.070                     | 8.00             | 1.00 | 0.80             |

# RESETTABLE FUSE (PPTC)

| Model         | V max<br>(Vdc) | I max<br>(Amps) | I hold<br>(Amps) | I trip<br>(Amps) | R <sub>i</sub> min<br>(Ω) | R1 max<br>(Ω) | Max Time To Trip |      | P (d)<br>(Watts) |
|---------------|----------------|-----------------|------------------|------------------|---------------------------|---------------|------------------|------|------------------|
|               |                |                 |                  |                  |                           |               | Amps             | Sec. |                  |
| 1812SMD010    | 30.0           | 100             | 0.10             | 0.30             | 0.750                     | 15.00         | 0.50             | 1.50 | 0.80             |
| 1812SMD014    | 60.0           | 100             | 0.14             | 0.34             | 0.650                     | 6.000         | 1.50             | 0.15 | 0.80             |
| 1812SMD020    | 30.0           | 100             | 0.20             | 0.40             | 0.350                     | 5.000         | 8.00             | 0.02 | 0.80             |
| 1812SMD030    | 30.0           | 100             | 0.30             | 0.60             | 0.250                     | 3.000         | 8.00             | 0.10 | 0.80             |
| 1812SMD050    | 15.0           | 100             | 0.50             | 1.00             | 0.150                     | 1.000         | 8.00             | 0.15 | 0.80             |
| 1812SMD050/33 | 33.0           | 100             | 0.50             | 1.00             | 0.150                     | 1.000         | 8.00             | 0.15 | 0.80             |
| 1812SMD075    | 13.2           | 100             | 0.75             | 1.50             | 0.090                     | 0.450         | 8.00             | 0.20 | 0.80             |
| 1812SMD075/16 | 16.0           | 100             | 0.75             | 1.50             | 0.090                     | 0.450         | 8.00             | 0.20 | 0.80             |
| 1812SMD075/24 | 24.0           | 100             | 0.75             | 1.50             | 0.090                     | 0.450         | 8.00             | 0.20 | 0.80             |
| 1812SMD110    | 8.0            | 100             | 1.10             | 2.20             | 0.050                     | 0.250         | 8.00             | 0.30 | 0.80             |
| 1812SMD110/16 | 16.0           | 100             | 1.10             | 2.20             | 0.050                     | 0.250         | 8.00             | 0.30 | 0.80             |
| 1812SMD125    | 16.0           | 100             | 1.25             | 2.50             | 0.050                     | 0.140         | 8.00             | 0.40 | 0.80             |
| 1812SMD150    | 8.0            | 100             | 1.50             | 3.00             | 0.040                     | 0.160         | 8.00             | 0.50 | 0.80             |
| 1812MD150/16  | 16.0           | 100             | 1.50             | 3.00             | 0.040                     | 0.160         | 8.00             | 0.50 | 0.80             |
| 1812SMD160    | 8.0            | 100             | 1.60             | 2.80             | 0.030                     | 0.130         | 8.00             | 1.00 | 0.80             |
| 1812SMD200    | 8.0            | 100             | 2.00             | 4.00             | 0.020                     | 0.100         | 8.00             | 2.00 | 0.80             |
| 1812SMD260    | 8.0            | 100             | 2.60             | 5.00             | 0.015                     | 0.050         | 8.00             | 2.50 | 0.80             |
| 1812SMD300    | 8.0            | 100             | 3.00             | 5.00             | 0.012                     | 0.040         | 8.00             | 4.00 | 0.80             |
| 1812SMD350    | 6.0            | 100             | 3.50             | 6.00             | 0.008                     | 0.030         | 10.0             | 4.00 | 2.00             |

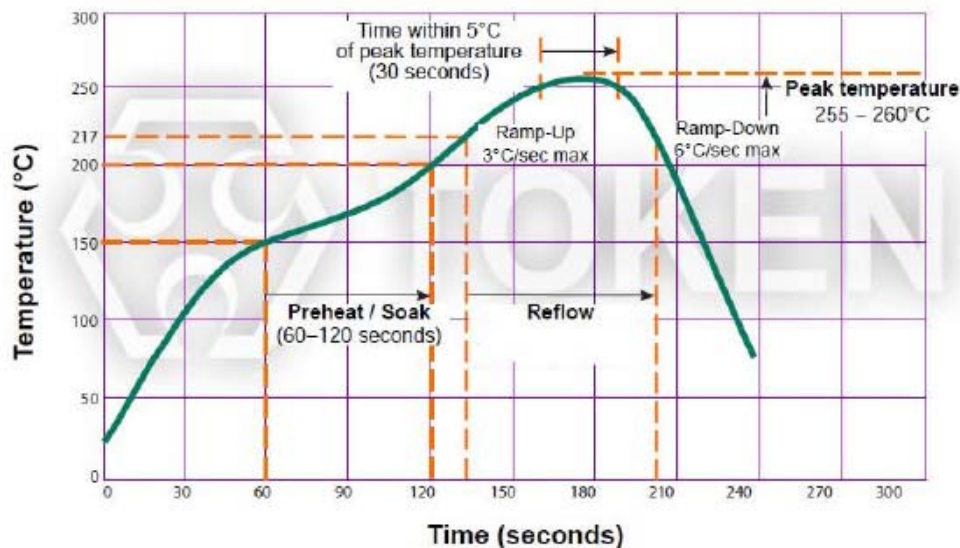
| Model         | V max<br>(Vdc) | I max<br>(Amps) | I hold<br>(Amps) | I trip<br>(Amps) | R <sub>i</sub> min<br>(Ω) | R1 max<br>(Ω) | Max Time To Trip |      | P (d)<br>(Watts) |
|---------------|----------------|-----------------|------------------|------------------|---------------------------|---------------|------------------|------|------------------|
|               |                |                 |                  |                  |                           |               | Amps             | Sec. |                  |
| 2920SMD030    | 60.0           | 100             | 0.30             | 0.60             | 0.600                     | 4.800         | 1.5              | 3.0  | 1.50             |
| 2920SMD050    | 60.0           | 100             | 0.50             | 1.00             | 0.180                     | 1.400         | 2.5              | 4.0  | 1.50             |
| 2920SMD075    | 33.0           | 100             | 0.75             | 1.50             | 0.100                     | 1.000         | 8.0              | 0.3  | 1.50             |
| 2920SMD100    | 33.0           | 100             | 1.10             | 2.20             | 0.065                     | 0.410         | 8.0              | 0.5  | 1.50             |
| 2920SMD125    | 33.0           | 100             | 1.25             | 2.50             | 0.050                     | 0.250         | 8.0              | 2.0  | 1.50             |
| 2920SMD150/16 | 16.0           | 100             | 1.50             | 3.00             | 0.035                     | 0.230         | 8.0              | 2.0  | 1.50             |
| 2920SMD150/33 | 33.0           | 100             | 1.50             | 3.00             | 0.035                     | 0.230         | 8.0              | 2.0  | 1.50             |
| 2920SMD185    | 33.0           | 100             | 1.85             | 3.70             | 0.030                     | 0.150         | 8.0              | 2.5  | 1.50             |
| 2920SMD200/16 | 16.0           | 100             | 2.00             | 4.00             | 0.020                     | 0.120         | 8.0              | 4.5  | 1.50             |
| 2920SMD200/24 | 24.0           | 100             | 2.00             | 4.00             | 0.020                     | 0.120         | 8.0              | 4.5  | 1.50             |
| 2920SMD250    | 16.0           | 100             | 2.50             | 5.00             | 0.020                     | 0.085         | 8.0              | 16.0 | 1.50             |
| 2920SMD260/6  | 6.0            | 100             | 2.60             | 5.20             | 0.014                     | 0.075         | 8.0              | 10.0 | 1.50             |
| 2920SMD260/16 | 16.0           | 100             | 2.60             | 5.20             | 0.014                     | 0.075         | 8.0              | 10.0 | 1.50             |
| 2920SMD300/6  | 6.0            | 40              | 3.00             | 6.00             | 0.012                     | 0.048         | 8.0              | 20.0 | 1.50             |
| 2920SMD300/16 | 16.0           | 100             | 3.00             | 6.00             | 0.012                     | 0.048         | 80.              | 20.0 | 1.50             |

# RESETTABLE FUSE (PPTC)

## Environmental Specification

| ITEM                                                                     | TEST METHOD                 | SPECIFICATION ( $\Delta R$ ) |
|--------------------------------------------------------------------------|-----------------------------|------------------------------|
| Passive aging                                                            | +85°C, 1000 hrs.            | ±5% typical                  |
| Humidity aging                                                           | +85°C, 85% R.H. , 168 hours | ±5% typical                  |
| Thermal shock                                                            | +85°C to -40°C, 20 times    | ±33% typical                 |
| Resistance to solvent                                                    | MIL-STD-202,Method 215      | No change                    |
| Vibration                                                                | MIL-STD-202,Method 201      | No change                    |
| Ambient operating conditions : - 40 °C to +85 °C                         |                             |                              |
| Maximum surface temperature of the device in the tripped state is 125 °C |                             |                              |

## Recommended reflow profile



- Recommended reflow methods : IR vapor phase oven, hot air oven.
- Devices are not designed to be wave soldered to the bottom side of the board.
- Recommended maximum paste thickness is 0.25 mm (0.010 inch).
- Devices can be cleaned using standard method and solvents.

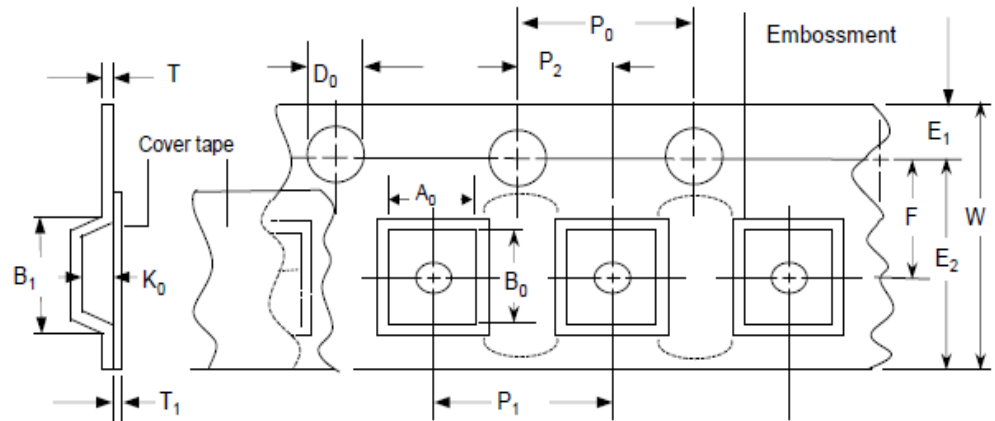
Note : If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

# RESETTABLE FUSE (PPTC)

## Tape & Reel Specification (EIA 481-1)

|                        |           |
|------------------------|-----------|
| W                      | 12±0.3    |
| P <sub>0</sub>         | 4.0±0.10  |
| P <sub>1</sub>         | 8.0±0.10  |
| P <sub>2</sub>         | 2.0±0.05  |
| A <sub>0</sub>         | 3.5±0.23  |
| B <sub>0</sub>         | 5.1±0.15  |
| B <sub>1max</sub>      | 5.90      |
| D <sub>0</sub>         | 1.5+0.1-0 |
| F                      | 5.5±0.05  |
| E <sub>1</sub>         | 1.75±0.10 |
| E <sub>2min</sub>      | 10.25     |
| T <sub>max</sub>       | 0.60      |
| T <sub>1max</sub>      | 0.10      |
| K <sub>0</sub>         | 0.9±0.15  |
| Leader <sub>min</sub>  | 390       |
| Trailer <sub>min</sub> | 160       |

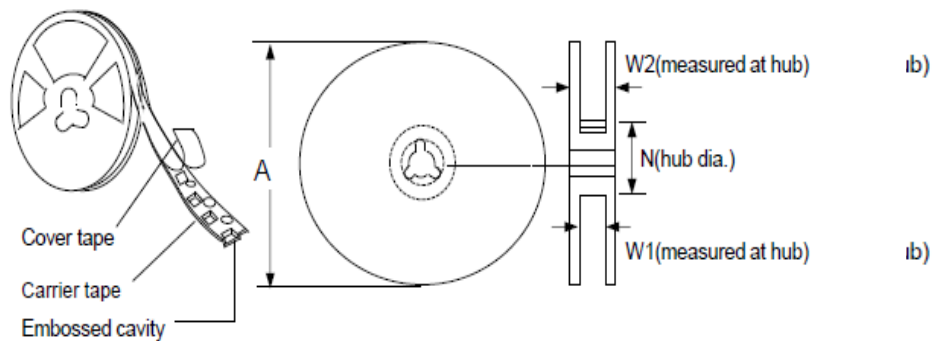
EIA Tape Component Dimensions



## Reel Dimension

|        |            |
|--------|------------|
| A max  | 178        |
| N min  | 60         |
| W1     | 12.4+2.0-0 |
| W2 max | 18.4       |

EIA Reel Dimensions



## Storage

- Storage conditions : 40°C max,  
70% R.H.

## WARNING:

- Use PPTC beyond the maximum ratings or improper use may result in device damage and possible electrical arcing and flame.
- PPTC are intended for protection against occasional over current or over temperature fault conditions and should not be used when repeated fault conditions or prolonged trip events are anticipated.
- Device performance can be impacted negatively if devices are handled in a manner inconsistent with recommended electronic, thermal, and mechanical procedures for electronic components.
- Use PPTC with a large inductance in circuit will generate a circuit voltage ( $L \frac{di}{dt}$ ) above the rated voltage of the PPTC.
- Avoid impact PPTC device its thermal expansion like placed under pressure or installed in limited space.
- Contamination of the PPTC material with certain silicon based oils or some aggressive solvents can adversely impact the performance of the devices. PPTC SMD can be cleaned by standard methods.
- Requests that customers comply with our recommended solder pad layouts and recommended reflow profile. Improper board layouts or reflow profile could negatively impact solderability