

### Performance Specification

| Model          | Marking | V <sub>max</sub><br>(V dc) | I <sub>max</sub><br>(A) | I <sub>hold</sub><br>@25°C<br>(A) | I <sub>trip</sub><br>@25°C<br>(A) | P <sub>d</sub><br>Typ.<br>(W) | Maximum Time To Trip |               | Resistance                |                          |
|----------------|---------|----------------------------|-------------------------|-----------------------------------|-----------------------------------|-------------------------------|----------------------|---------------|---------------------------|--------------------------|
|                |         |                            |                         |                                   |                                   |                               | Current<br>(A)       | Time<br>(Sec) | R <sub>i min</sub><br>(Ω) | R <sub>1max</sub><br>(Ω) |
| K1206L025/24BR | R2      | 24.0                       | 10                      | 0.25                              | 0.50                              | 0.6                           | 8.00                 | 0.08          | 0.350                     | 2.500                    |

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>).

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.

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

R<sub>1max</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.

### Environmental Specifications

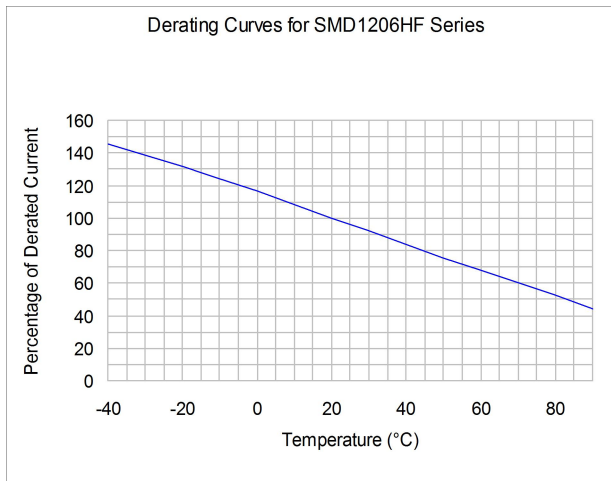
| Test                                                                     | Conditions                  | Resistance change  |
|--------------------------------------------------------------------------|-----------------------------|--------------------|
| Passive aging                                                            | +85°C, 1000 hrs.            | I HOLD/I TRIP PASS |
| Humidity aging                                                           | +85°C, 85% R.H. , 168 hours | I HOLD/I TRIP PASS |
| Thermal shock                                                            | +85°C to -40°C, 20 times    | I HOLD/I TRIP PASS |
| 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 |                             |                    |

### Thermal Derating Chart

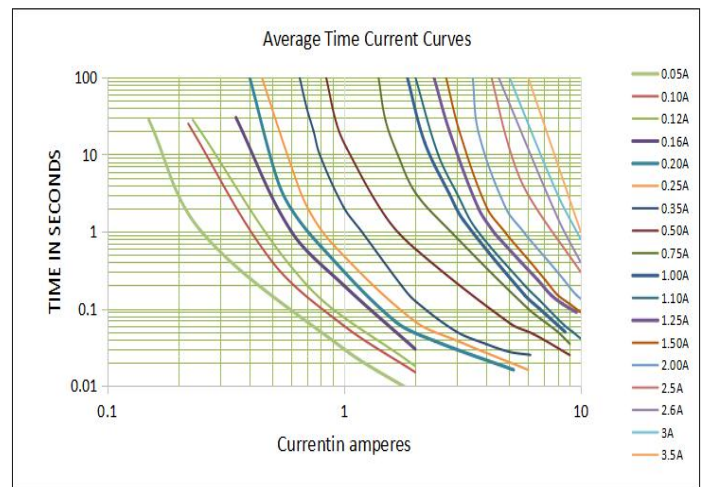
Recommended Hold Current(A) at Ambient Temperature(°C)

| Model          | Ambient Operation Temperature |       |      |      |      |      |      |      |      |
|----------------|-------------------------------|-------|------|------|------|------|------|------|------|
|                | -40°C                         | -20°C | 0°C  | 25°C | 40°C | 50°C | 60°C | 70°C | 85°C |
| K1206L025/24BR | 0.37                          | 0.33  | 0.29 | 0.25 | 0.22 | 0.20 | 0.17 | 0.15 | 0.12 |

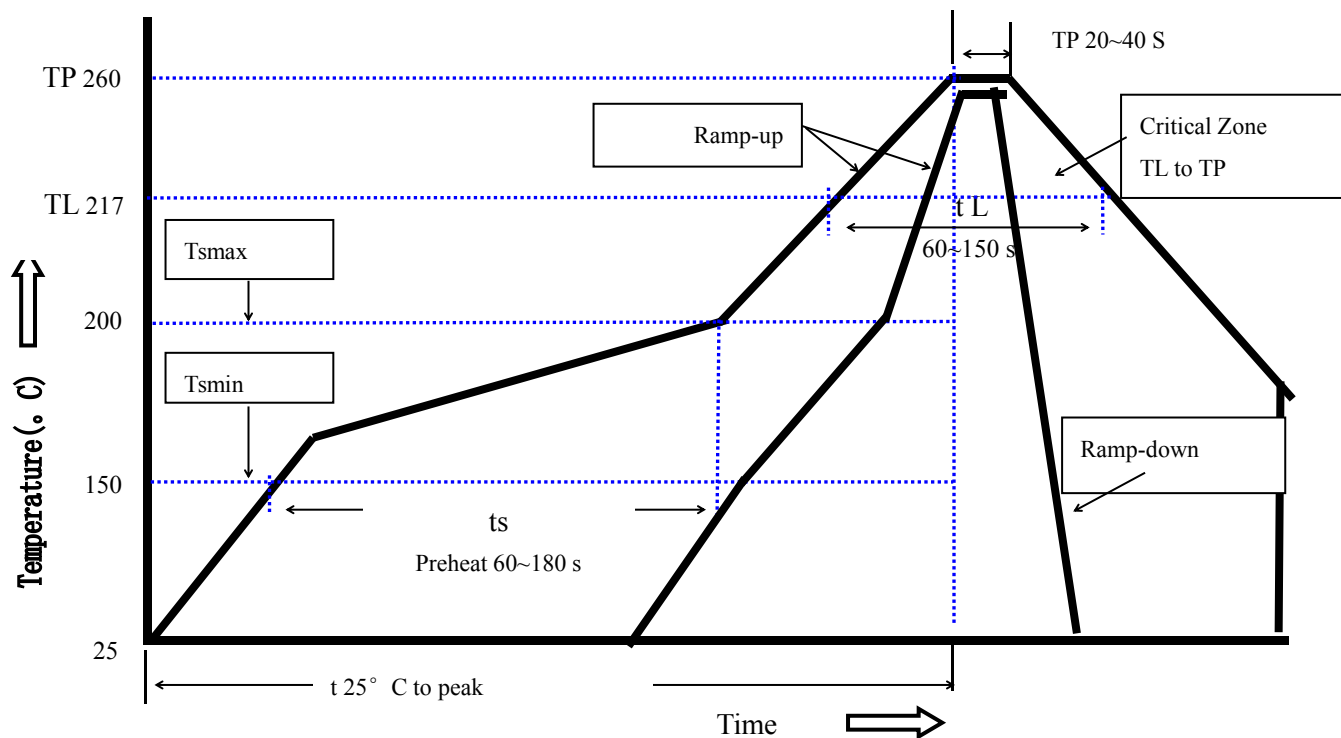
## Thermal Derating Curve



## Average Time-Current Curve



## Soldering Parameters



|                                     |                  |
|-------------------------------------|------------------|
| Profile Feature                     | Pb-Free Assembly |
| Average Ramp-Up Rate(Ts max to T p) | 3°C/second max.  |
| Preheat                             |                  |
| -Temperature Min(Ts min)            | 150°C            |
| -Temperature Max(Ts max)            | 200°C            |
| -Time(Ts min to Ts max)             | 60~180 seconds   |
| Time maintained above:              |                  |
| -Temperature(TL)                    | 217°C            |
| -Time(tL)                           | 60~150 seconds   |

|                              |                  |
|------------------------------|------------------|
| Peak Temperature(Tp)         | 260℃             |
| Ramp-Down Rate               | 6℃/second max.   |
| Time 25℃ to Peak Temperature | 8 minutes max    |
| Storage Condition            | 0℃~30℃,30%~60%RH |

Recommended reflow methods: IR, vapor phase oven, hot air oven, N2 environment for lead-free

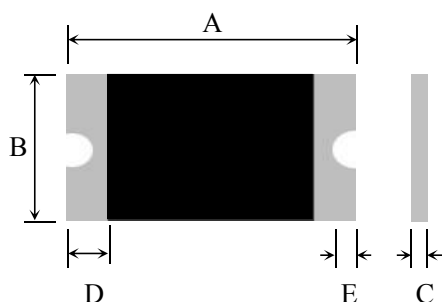
Recommended maximum paste thickness is 0.25mm

Devices can be cleaned using standard industry methods and solvents.

Note 1: All temperature refer to topside of the package, measured on the package body surface.

Note 2: If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

## Physical Dimensions(mm.)



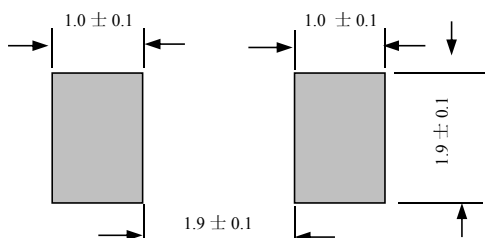
| Model          | A    |      | B    |      | C    |      | D    | E    |
|----------------|------|------|------|------|------|------|------|------|
|                | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Min. |
| K1206L025/24BR | 3.00 | 3.60 | 1.50 | 1.90 | 0.40 | 1.00 | 0.15 | 0.10 |

### Termination Pad Characteristics

Terminal pad materials: Tin-plated Nickel-Copper

Terminal pad solder ability: Meets EIA specification RS186-9E and ANSI/J-STD-002 Category 3.

## Recommended Pad Layout (mm.)



注：在此印锡面积条件下，推荐钢网厚度为 $\geq 0.12\text{MM}$ (钢网厚度不够要增大刷锡面积)

## Packaging Quantity

| Part Number    | Quantity      |
|----------------|---------------|
| K1206L025/24BR | 4500 pcs/reel |

Tape & reel packaging per EIA481-1