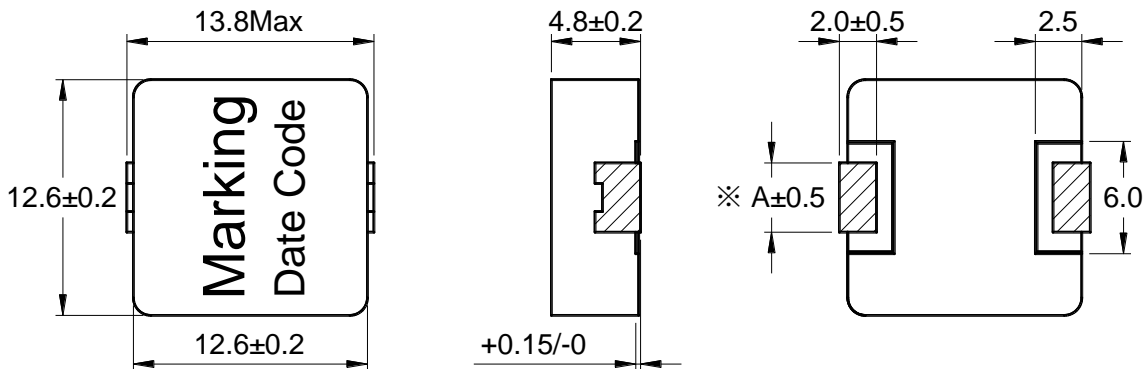


### Outline: 产品概要

- Magnetic shielded structure: excellent resistance to electro magnetic interference(EMI).  
磁屏蔽结构：抗电磁干扰(EMI)性能强。
- A composite structure, ultra low buzz noise.  
一体成型结构，超低蜂鸣噪音。
- Low loss, high efficiency, wide application frequency.  
低损耗，高效率，应用频率宽。
- Lightweight design, save space, suitable for high density SMT.  
轻薄型设计，节省空间，适合高密度贴装。
- Die-casting by low loss alloy powder: low impedance, small parasitic capacitance.  
低损耗合金粉末压铸：低阻抗，寄生电容小。
- Operating temperature : -40°C ~ +125°C (Including coil's temperature rise)  
工作温度：-40°C ~ +125°C (包含线圈发热)

### 1 Appearance and dimensions (mm) 外形尺寸

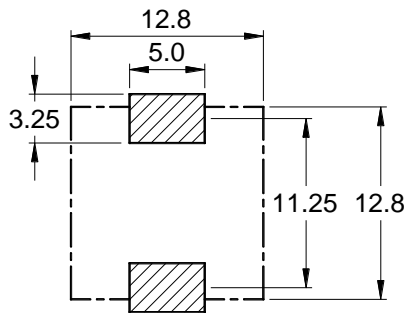


|             |               |        |
|-------------|---------------|--------|
| Part No.    | R68, 1R5, 3R3 | Others |
| Dimension A | 3.00          | 3.70   |

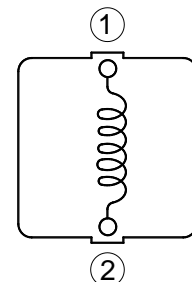
### 2 Marking 印字标识



### 3 Reference land pattern (mm) 参考基板尺寸



### 4 Schematic 原理图



**5 Electrical characteristics**

**电气特性**

| Part No.<br>型号 | Inductance (μH)<br>电感值 ※1<br>±20% | D.C.R. (mΩ)<br>直流电阻 |      | Saturation<br>current (A)<br>饱和电流 ※2<br>Typical | Temperature rise<br>current (A)<br>温升电流 ※3<br>Typical |
|----------------|-----------------------------------|---------------------|------|---|---|
|                |                                   | Typical             | Max  |   |   |
| CSAB1250A-R15M | 0.15                              | 0.50                | 0.60 | 75.0  | 50.0  |
| CSAB1250A-R22M | 0.22                              | 0.50                | 0.80 | 70.0  | 50.0  |
| CSAB1250A-R33M | 0.33                              | 0.75                | 1.00 | 60.0  | 41.0  |
| CSAB1250A-R47M | 0.47                              | 1.05                | 1.20 | 50.0  | 35.0  |
| CSAB1250A-R68M | 0.68                              | 1.60                | 1.90 | 40.0  | 28.5  |
| CSAB1250A-R80M | 0.80                              | 1.80                | 2.00 | 40.0  | 26.5  |
| CSAB1250A-1R0M | 1.00                              | 1.95                | 2.20 | 37.0  | 25.5  |
| CSAB1250A-1R5M | 1.50                              | 2.60                | 3.20 | 33.0  | 22.0  |
| CSAB1250A-2R2M | 2.20                              | 4.40                | 5.00 | 32.0  | 17.0  |
| CSAB1250A-3R3M | 3.30                              | 5.30                | 7.00 | 22.0  | 15.5  |
| CSAB1250A-4R7M | 4.70                              | 9.80                | 15.0 | 18.0  | 11.4  |
| CSAB1250A-5R6M | 5.60                              | 12.1                | 17.0 | 17.0  | 10.2  |
| CSAB1250A-6R8M | 6.80                              | 16.3                | 20.0 | 15.0  | 8.80  |
| CSAB1250A-8R2M | 8.20                              | 19.1                | 21.0 | 13.0  | 8.10  |
| CSAB1250A-100M | 10.0                              | 20.5                | 22.0 | 12.0  | 7.80  |
| CSAB1250A-150M | 15.0                              | 32.5                | 40.0 | 10.0  | 6.20  |
| CSAB1250A-220M | 22.0                              | 42.0                | 58.0 | 6.50  | 5.50  |
| CSAB1250A-330M | 33.0                              | 62.1                | 84.0 | 6.00  | 4.50  |
| CSAB1250A-470M | 47.0                              | 96.8                | 130  | 5.00  | 3.60  |

■ All data is tested based on 25°C ambient temperature.

所有数据基于环境温度 25°C条件下测试。

※1 Inductance measure condition at 100kHz, 1V.

电感测试条件为 100kHz, 1V。

※2 Saturation current: the actual value of DC current when the inductance decrease 30% of its initial value.

饱和电流: 电感值下降其初始值的 30%时所加载的实际直流电流值。

※3 Temperature rise current: the actual value of DC current when the temperature rise is ΔT40°C(Ta=25°C).

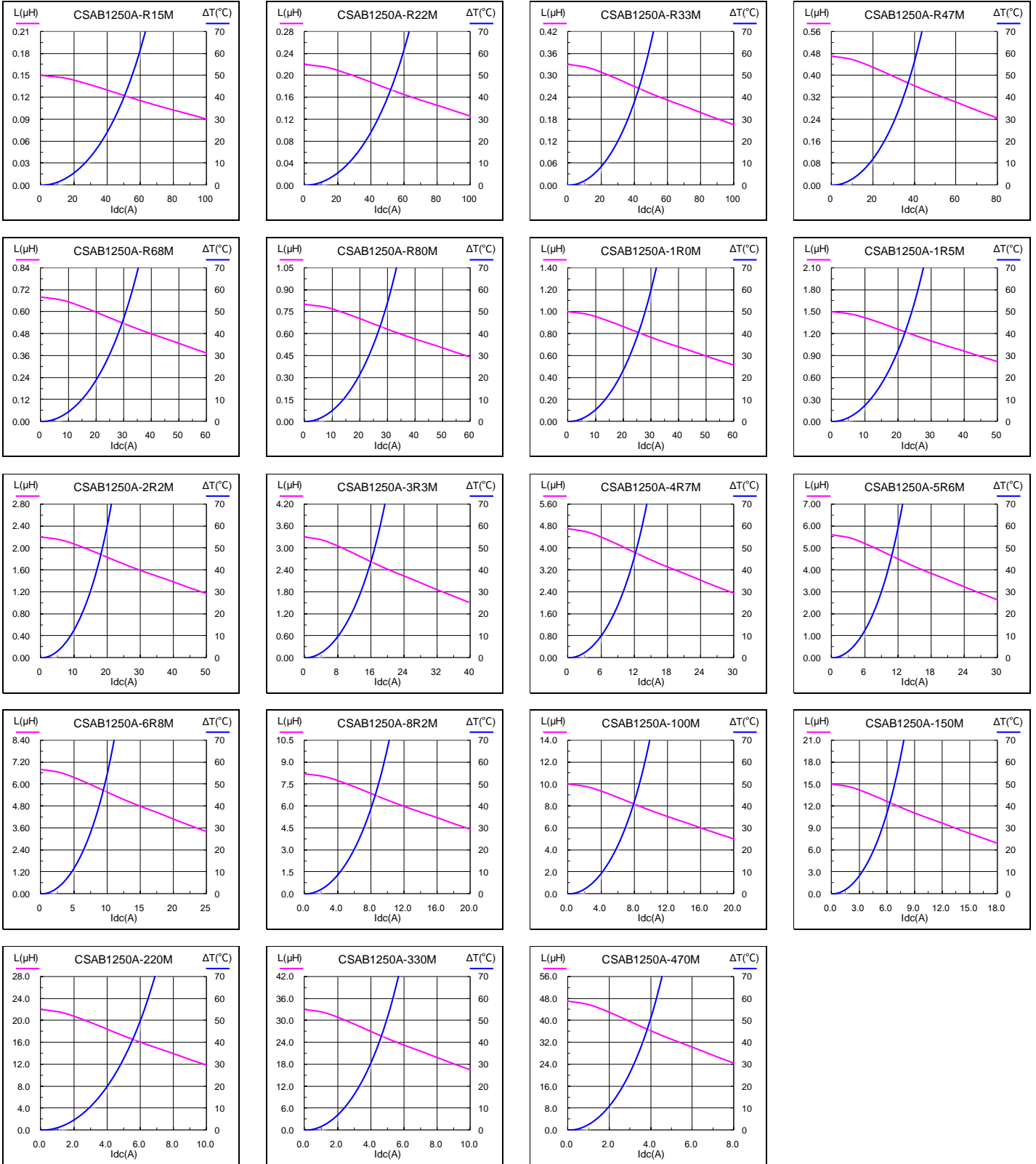
温升电流: 使产品温度上升到 ΔT40°C时所加载的实际直流电流值(Ta=25°C)。

※ Special remind: Circuit design, component placement, PWB size and thickness, cooling system and etc. all will affect the product temperature. Please verify the product temperature in the final application.

特别提醒: 线路设计, 组件布局, 印刷线路板(PWB)尺寸及厚度, 散热系统等均会影响产品温度。

请务必在最终应用时, 验证产品发热状况。

**6 Saturation current VS temperature rise current curve  
饱和电流 VS 温升电流曲线**

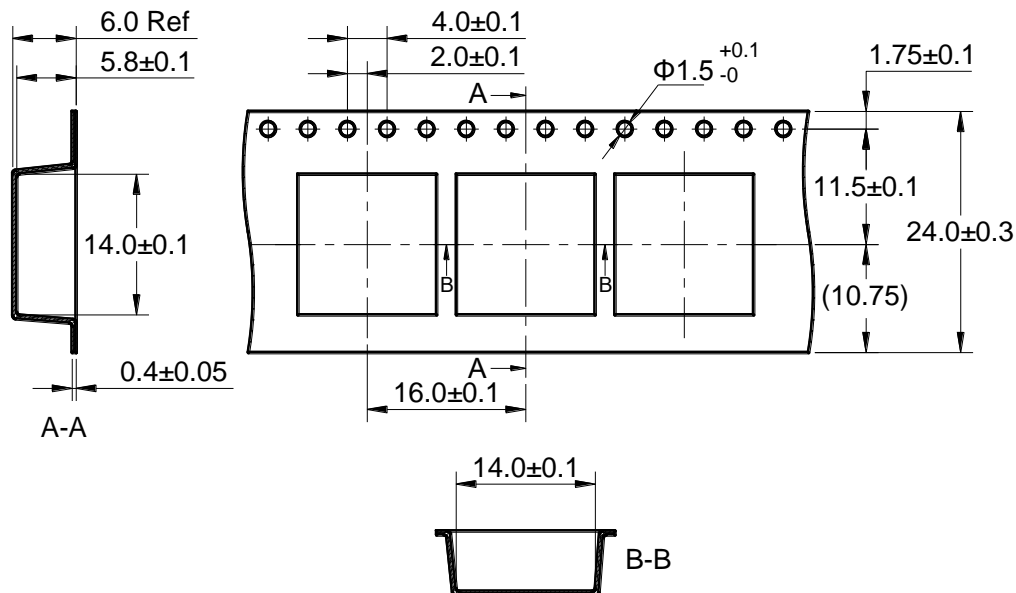


## 7 Packing specification

### 包装规格

#### 7.1 Carrier tape dimensions (mm)

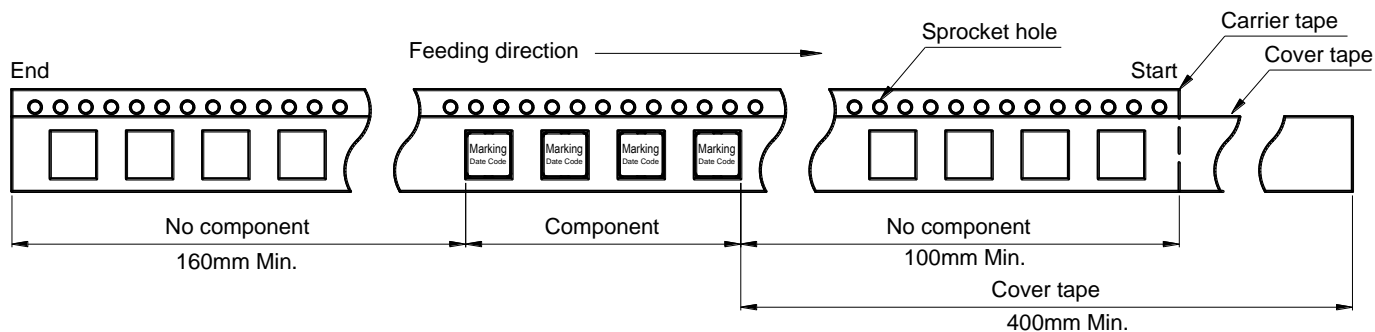
##### 载带尺寸



※ Packing is referred to the international standard IEC 60286-3.  
包装参照国际标准 IEC 60286-3。

#### 7.2 Tape direction

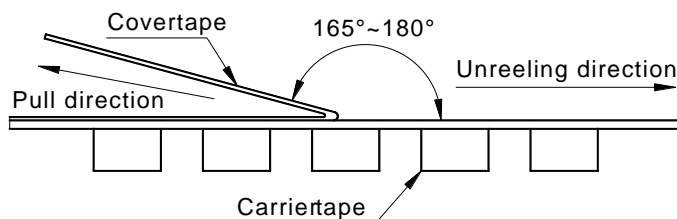
##### 捆包方向



#### 7.3 Cover tape peel off condition

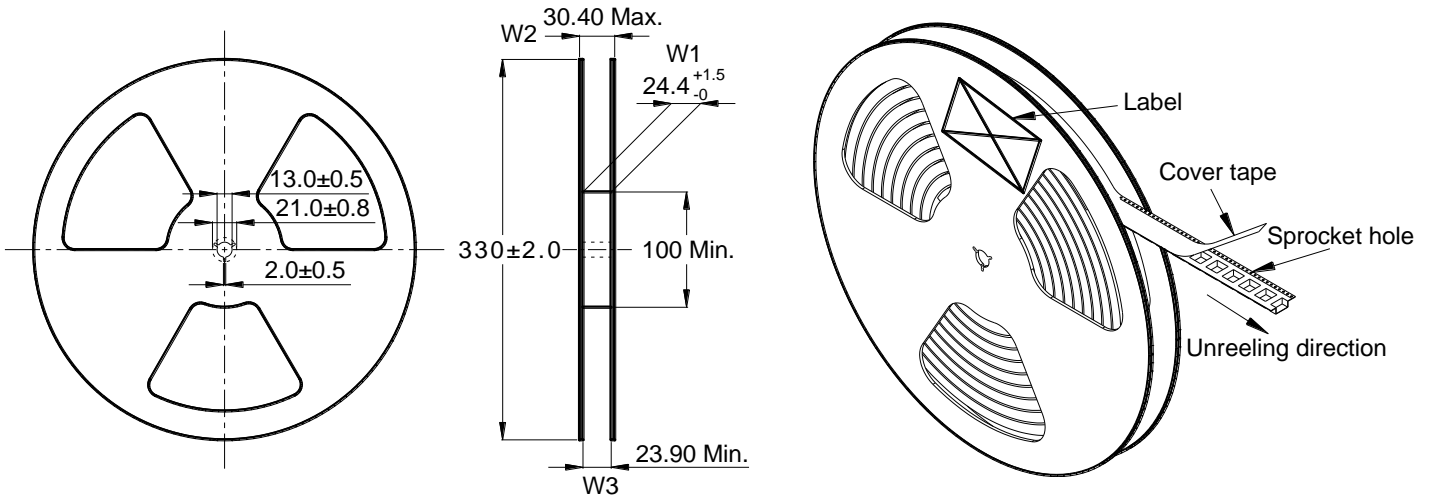
##### 盖带剥离条件

- Cover tape peel force shall be 0.1 to 1.3N.  
盖带剥离力度为 0.1~1.3N。
- Reference peel speed 300±10mm/min.  
参考剥离速度 300±10mm/分钟。



## 7.4 Reel dimensions (mm)

卷盘尺寸



## 7.5 Carton dimensions and packing quantity

包装箱尺寸和包装数量

■ Inner Carton: 340×340×95mm  
内包装盒

■ Out Carton : 355×355×385mm  
外包装箱

| Product Series<br>产品系列 | Quantity / Reel<br>数量 / 卷 | Inner Carton Quantity<br>内盒 包装数量 | Out Carton Quantity<br>外箱 包装总数量 |
|------------------------|---------------------------|----------------------------------|---------------------------------|
| CSAB1250A              | 500pcs                    | (500×2) = 1000pcs                | (1000×3) = 3000pcs              |

## 7.6 Label making

标签标识

The following items will be marked on the reel of product label and shipping label.  
以下项目将明确标识于产品卷盘标签以及运输标签上。

| Production Label<br>产品标签           |
|------------------------------------|
| ■ Part No.<br>产品型号                 |
| ■ Electrical Information<br>产品电性信息 |
| ■ Quantity<br>数量                   |
| ■ Packing No.<br>包装流水号             |

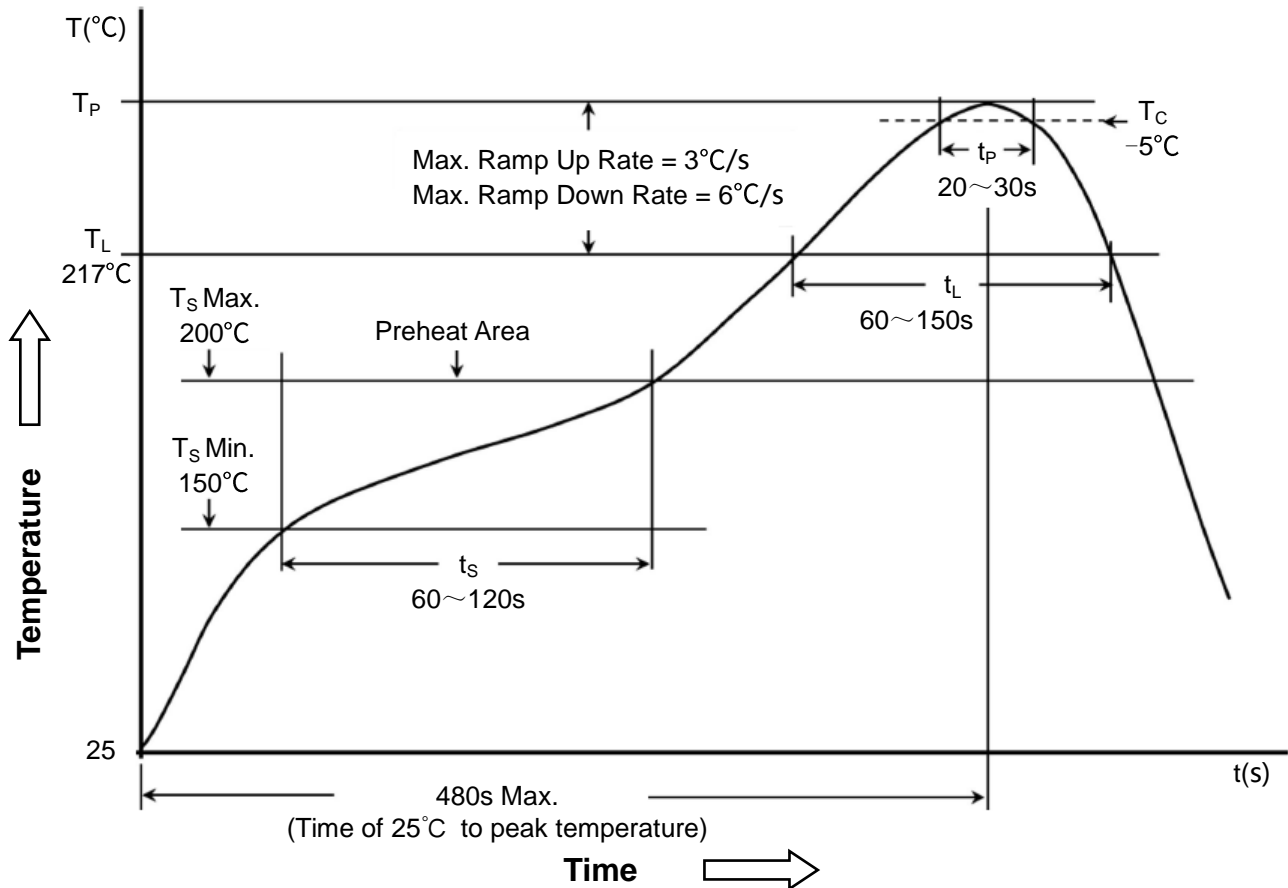
| Shipping Label<br>运输标签       |
|------------------------------|
| ■ Customer Name<br>客户名称      |
| ■ Customer Part No.<br>客户型号  |
| ■ Supplier Part No.<br>供应商型号 |
| ■ Supplier Name<br>供应商名称     |
| ■ Country of origin<br>产品产地  |

## 8 Soldering specification

### 焊接规格

#### 8.1 Reflow profile for SMT components

SMT 回流焊温度曲线



#### 8.2 Classification of peak package body temperature ( $T_P$ )

封装体峰值温度( $T_P$ )分类

|                          | Package Thickness<br>封装厚度 | Package Volume<br>封装体积 |                          |                       |
|--------------------------|---------------------------|------------------------|--------------------------|-----------------------|
|                          |                           | <350 mm <sup>3</sup>   | 350~2000 mm <sup>3</sup> | >2000 mm <sup>3</sup> |
| PB-Free Assembly<br>无铅装配 | <1.6mm                    | 260°C                  | 260°C                    | 260°C                 |
|                          | 1.6~2.5mm                 | 260°C                  | 250°C                    | 245°C                 |
|                          | ≥2.5mm                    | 250°C                  | 245°C                    | 245°C                 |

※ Reflow is referred to standard IPC/JEDEC J-STD-020D.  
回流焊参照标准 IPC/JEDEC J-STD-020D。