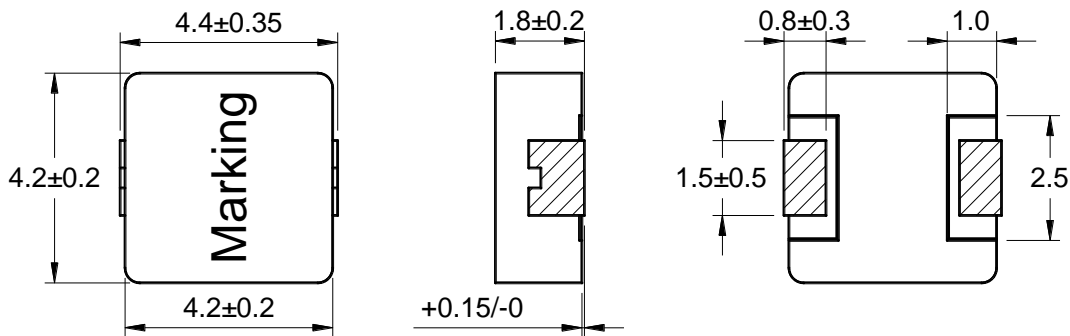


**Outline:
产品概要**

- 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)

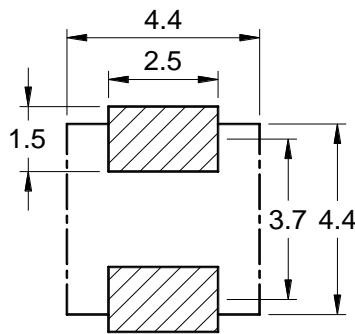
**1 Appearance and dimensions (mm)
外形尺寸**



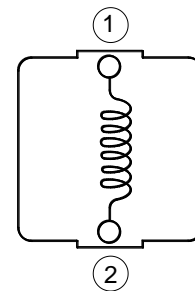
**2 Marking
印字标识**



**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. 型号	Inductance (μH) 电感值 ※1 ±20%	D.C.R. (mΩ) 直流电阻		Saturation current (A) 饱和电流 ※2 Typical	Temperature rise current (A) 温升电流 ※3 Typical
		Typical	Max		
CSAB0420-R10M	0.10	3.50	4.00	22.0	13.0
CSAB0420-R22M	0.22	5.80	6.60	12.5	10.0
CSAB0420-R47M	0.47	12.5	14.0	11.0	7.50
CSAB0420-R56M	0.56	14.0	16.0	10.0	7.00
CSAB0420-R68M	0.68	16.0	18.0	9.00	7.00
CSAB0420-1R0M	1.00	24.0	27.0	7.00	6.00
CSAB0420-1R2M	1.20	24.0	27.0	7.00	6.00
CSAB0420-1R5M	1.50	38.0	46.0	6.00	5.00
CSAB0420-2R2M	2.20	52.0	58.0	5.00	4.80
CSAB0420-3R3M	3.30	74.0	87.0	4.00	3.30
CSAB0420-4R7M	4.70	98.0	115	3.00	2.80
CSAB0420-6R8M	6.80	160	175	2.50	2.40
CSAB0420-100M	10.0	256	282	2.20	1.60
CSAB0420-220M	22.0	470	500	2.00	1.00

■ 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。

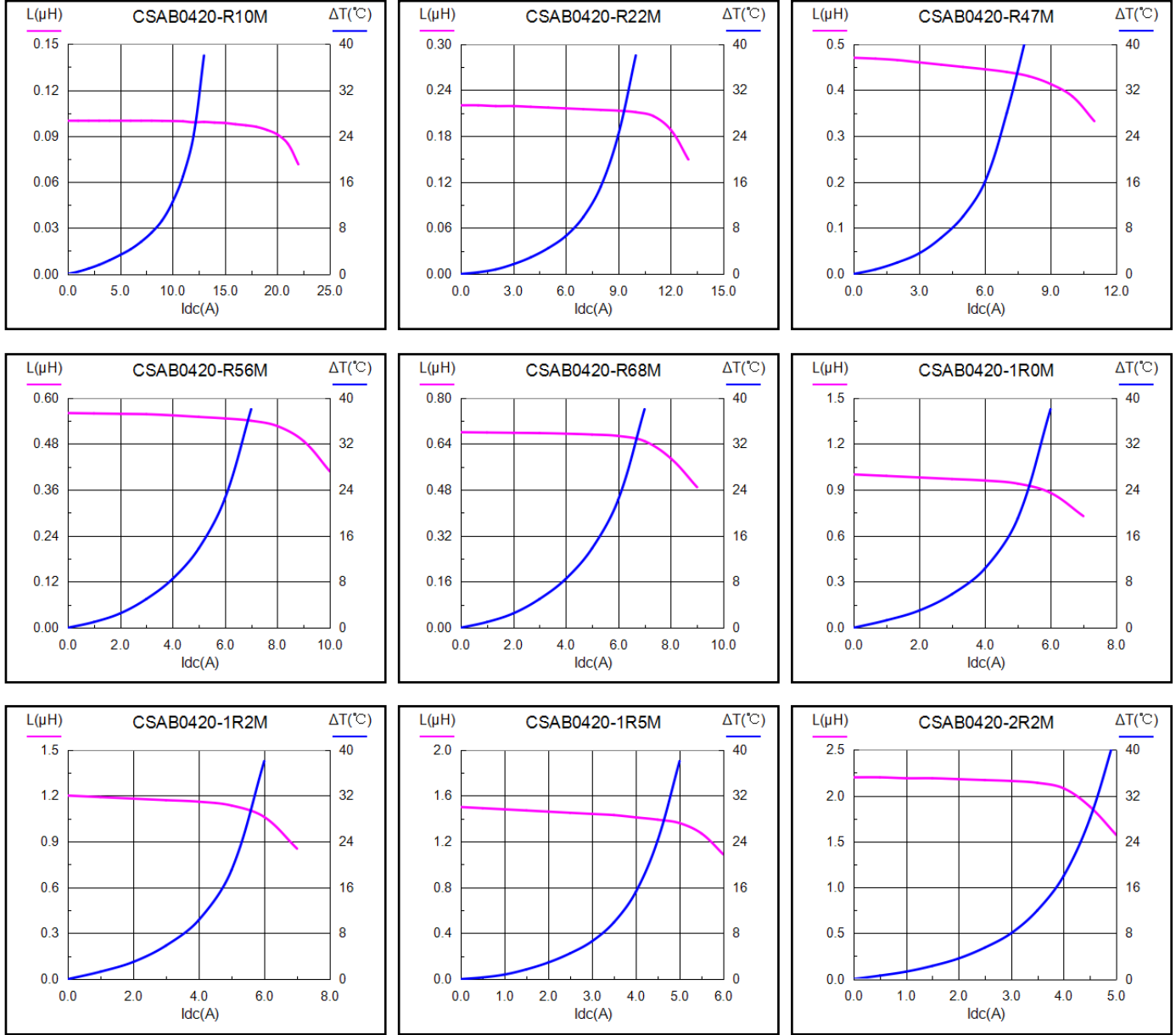
※1 Inductance measure condition at 100kHz, 1V.
电感测试条件为 100kHz, 1V。

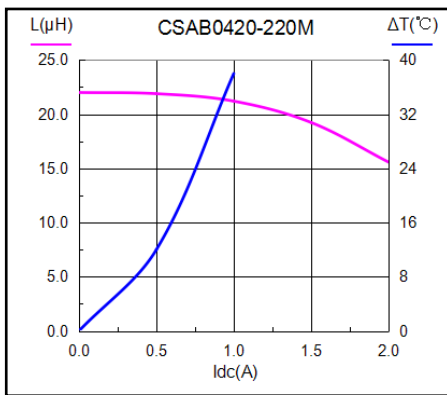
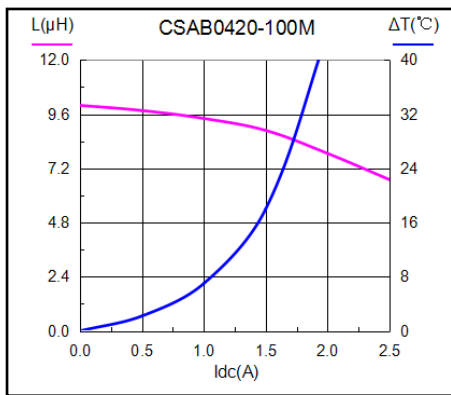
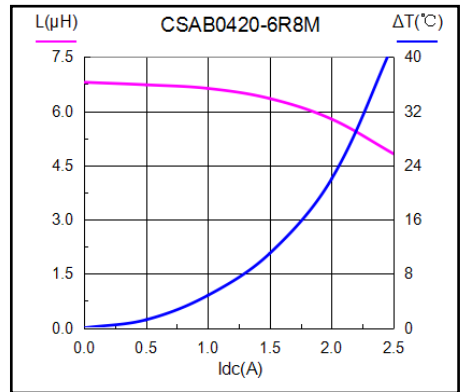
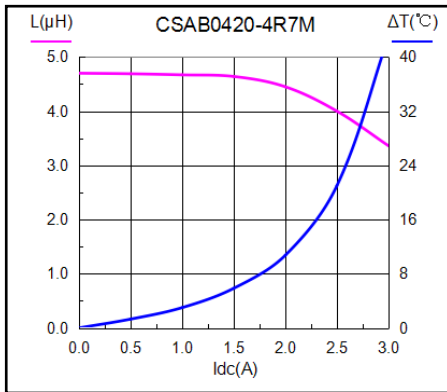
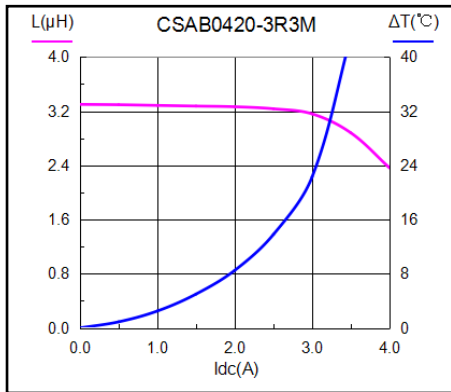
※2 Saturation current: the actual value of DC current when the inductance decrease 30% of its initial value.
饱和电流: 电感值下降其初始值的 30%时所加载的实际直流电流值。

※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**



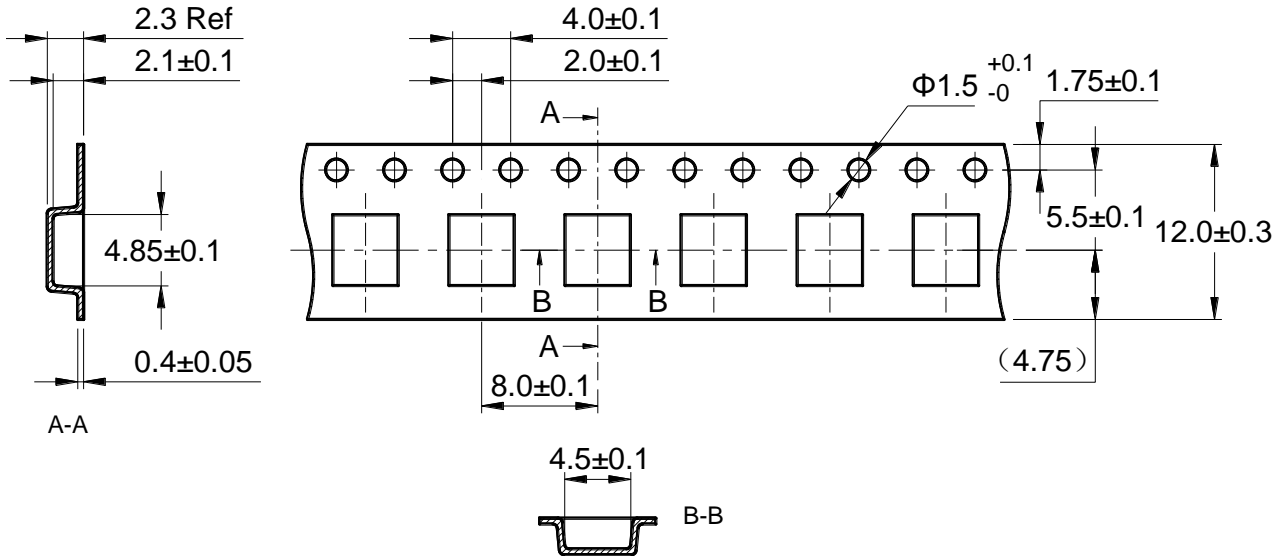


7 Packing specification

包装规格

7.1 Carrier tape dimensions (mm)

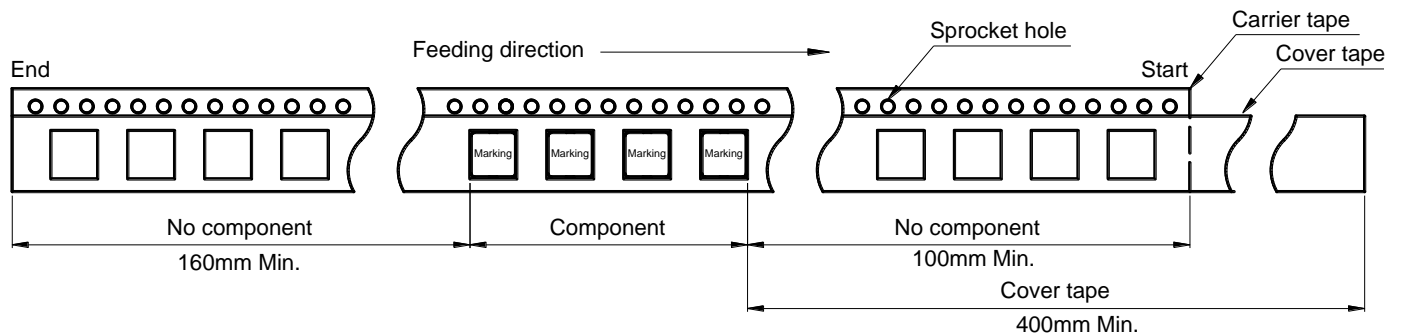
载带尺寸



※ 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

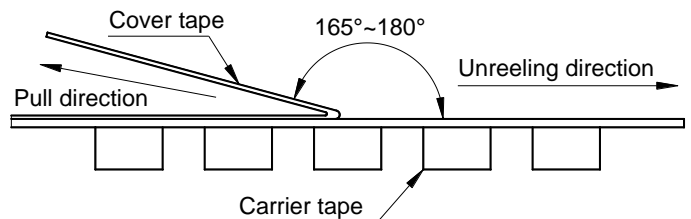
捆包方向



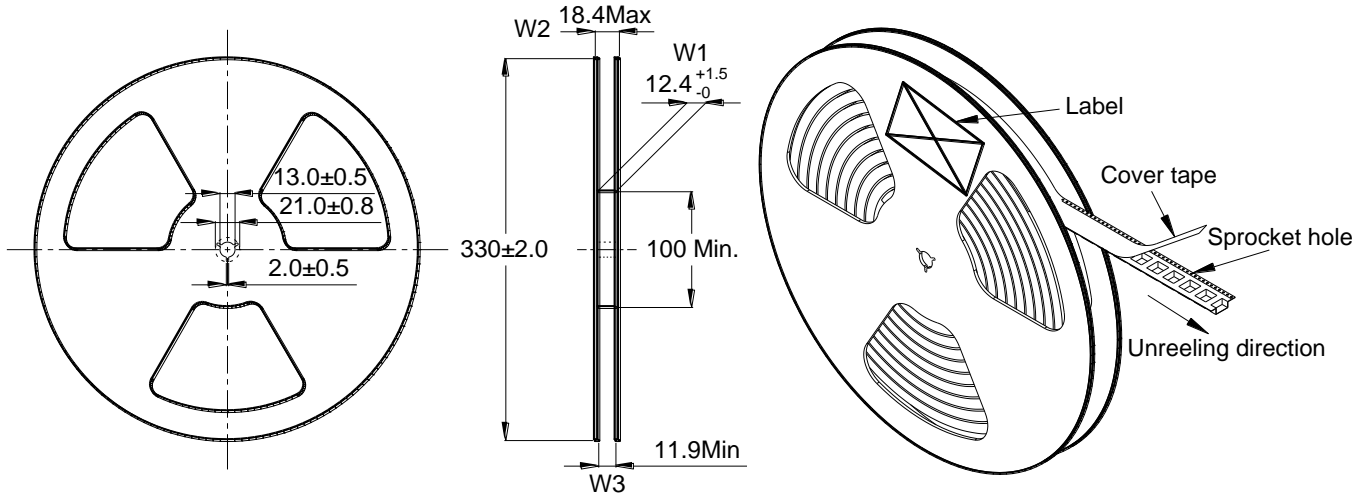
7.3 Cover tape peel off condition

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
包装箱尺寸

- Inner Carton: $340 \times 340 \times 95$ mm
内包装盒
- Out Carton: $355 \times 355 \times 385$ mm
外包装箱

Product Series 产品系列	Quantity / Reel 数量 / 卷	Inner Carton Quantity 内盒 包装数量	Out Carton Quantity 外箱 总包装数量
CSAB0420	2000pcs	8000pcs = (4 × 2000)	24000pcs = (3 × 8000)

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 产品标签
■ Part No. 产品型号
■ Electrical Information 产品电性信息
■ Quantity 数量
■ Packing No. 包装流水号

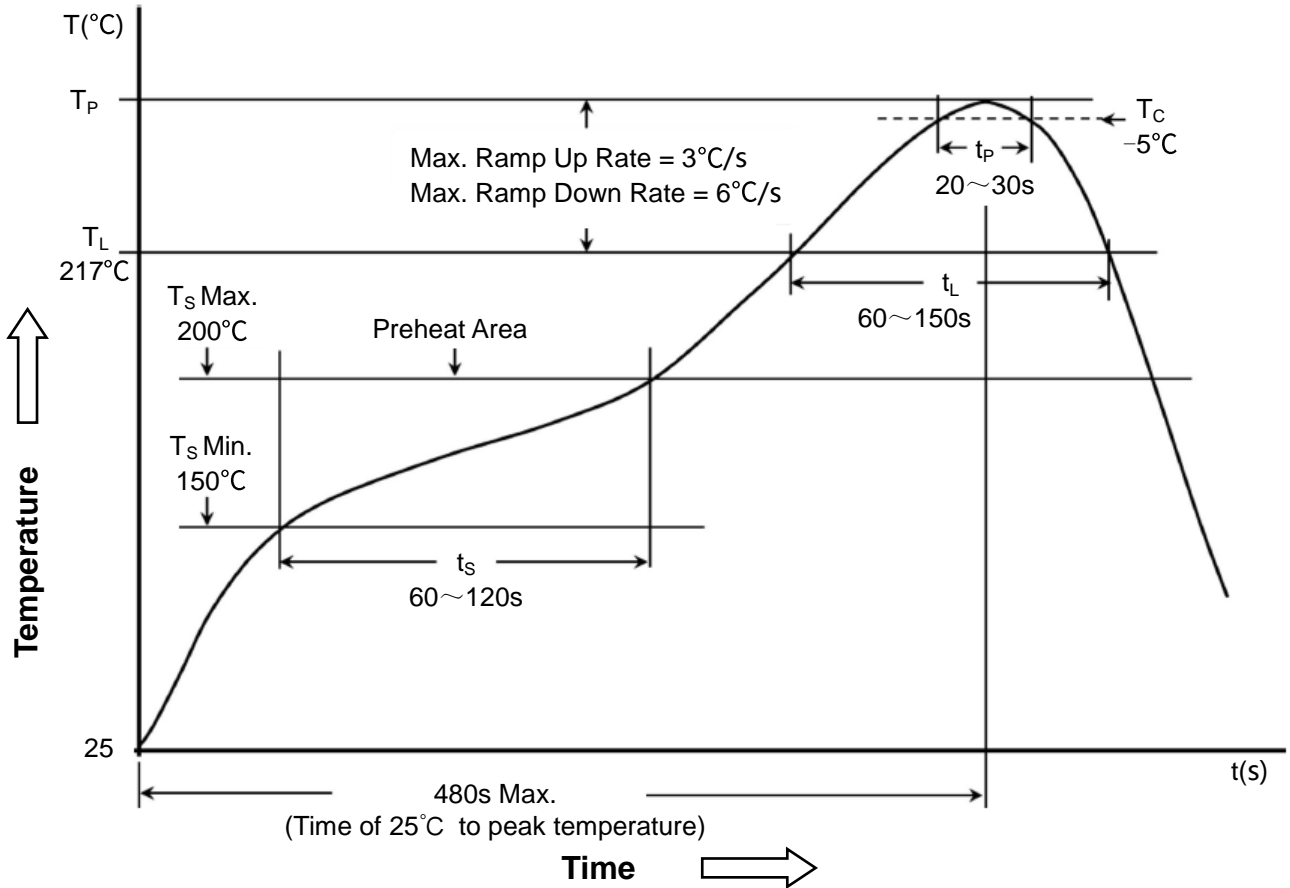
Shipping Label 运输标签
■ Customer Name 客户名称
■ Customer Part No. 客户型号
■ Supplier Part No. 供应商型号
■ Supplier Name 供应商名称
■ Country of origin 产品产地

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 (Tp)

封装体峰值温度(Tp)分类

	Package Thickness 封装厚度	Package Volume 封装体积		
		<350 mm ³	350~2000 mm ³	>2000 mm ³
PB-Free Assembly 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。