



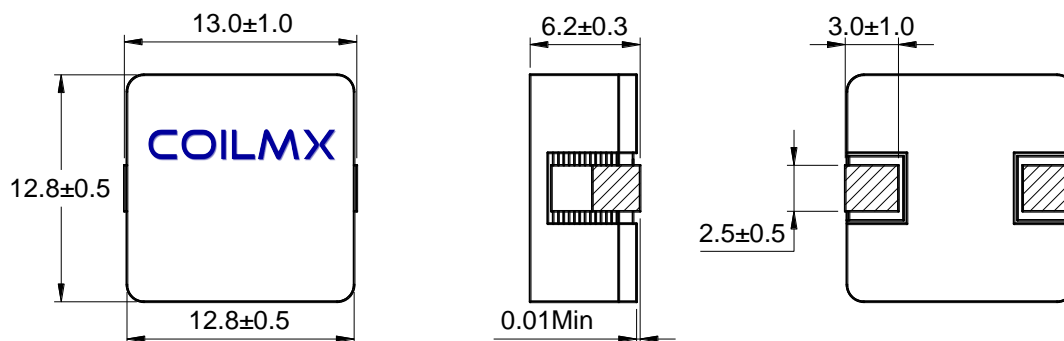
High Current Power Inductor MTF1265 Series



Outline: 产品概要

- Magnetic shielded structure: excellent resistance to electromagnetic interference(EMI)
磁屏蔽结构: 抗电磁干扰(EMI)性能强
- Flat wire winding, achieve a low D.C. Resistance.
扁平线绕组, 实现极低的直流电阻。
- Low loss, high efficiency, wide application frequency and application scope.
低损耗, 高效率, 应用频率宽, 适用范围广。
- 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。
- Operating temperature : $-55^{\circ}\text{C} \sim +150^{\circ}\text{C}$
(Including coil's temperature rise)
工作温度: $-55^{\circ}\text{C} \sim +150^{\circ}\text{C}$ (包含线圈发热)

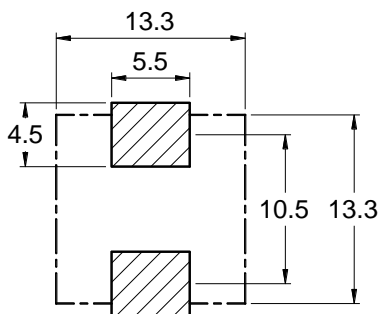
1 Appearance and dimensions (mm) 外形尺寸



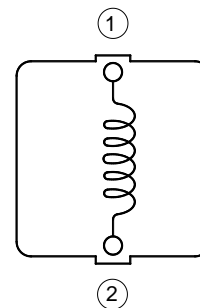
2 Marking 印字标识



3 Reference land pattern (mm) 参考基板尺寸



4 Schematic 原理图





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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		
MTF1265-R20M	0.20	0.35	0.40	65.0	32.0
MTF1265-R47M	0.47	0.67	0.70	50.0	30.0
MTF1265-R82M	0.82	0.90	1.00	35.0	27.0
MTF1265-1R3M	1.30	1.80	2.00	25.0	25.0
MTF1265-2R0M	2.00	2.60	2.90	22.0	23.0
MTF1265-2R8M	2.80	3.30	3.60	17.5	20.0
MTF1265-3R7M	3.70	4.90	5.40	16.0	17.0
MTF1265-4R7M	4.70	7.00	7.70	15.0	13.0
MTF1265-6R0M	6.00	8.40	9.20	14.0	12.0
MTF1265-7R3M	7.30	5.90	6.50	12.0	13.0
MTF1265-9R2M	9.20	7.80	8.60	10.5	12.0
MTF1265-110M	11.0	9.10	10.0	9.50	11.0
MTF1265-130M	13.0	11.2	12.3	9.00	10.0
MTF1265-150M	15.0	14.8	16.3	8.00	9.00
MTF1265-180M	18.0	22.0	24.2	7.50	7.50
MTF1265-220M	22.0	24.7	27.2	6.50	6.00
MTF1265-330M	33.0	30.5	33.6	5.50	5.50

■ 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, 0.1V.
电感测试条件为 100kHz, 0.1V。

※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 ΔT50°C(Ta=25°C).
温升电流: 使产品温度上升到 ΔT50°C时所加载的实际直流电流值(Ta=25°C)。

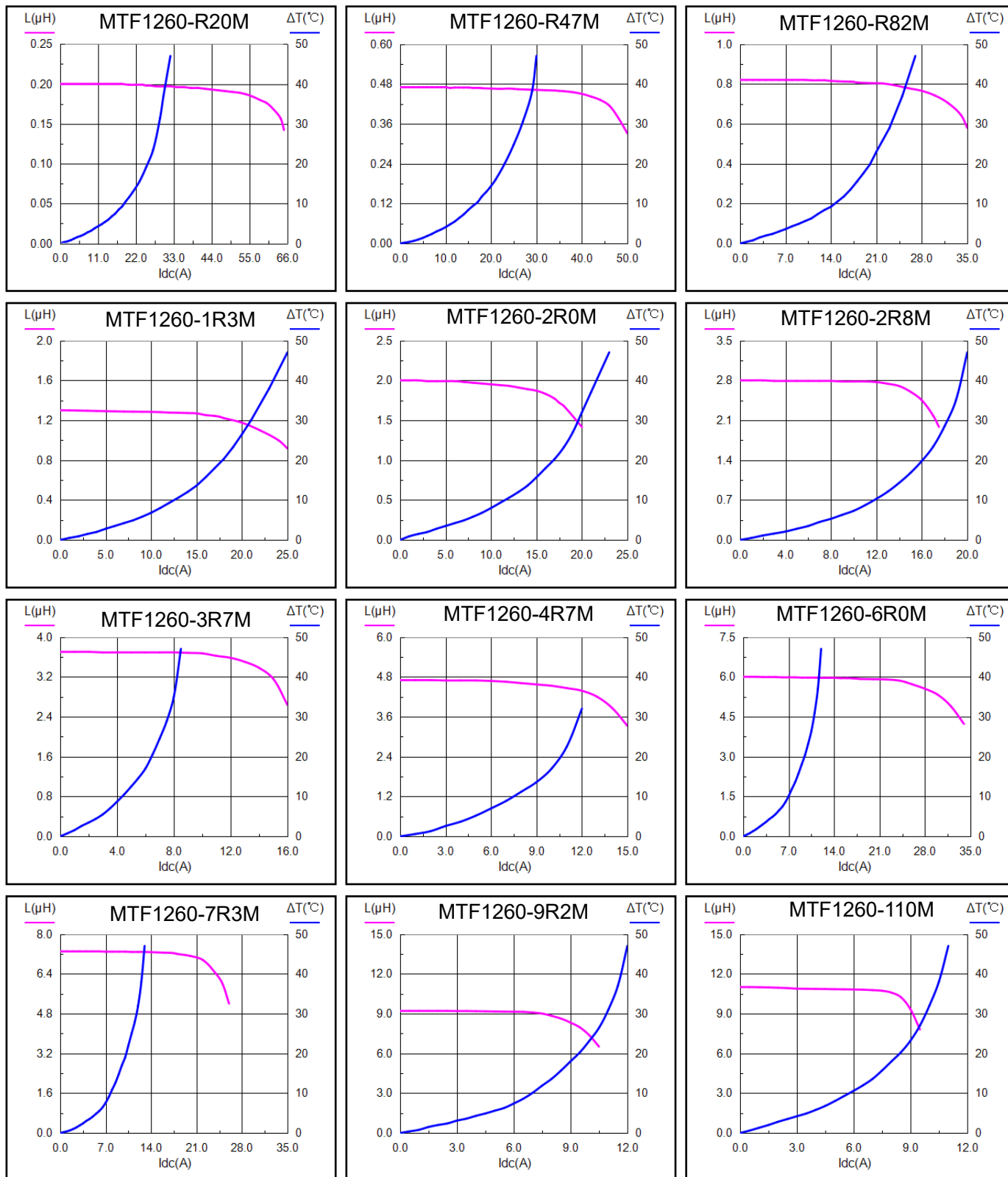
※ Special remind: Circuit design, component placement, PWB size and thickness, cooling system and etc. all will affect the product temperature. Please verify the product temperature in the final application.
特别提醒: 线路设计, 组件布局, 印刷电路板(PWB)尺寸及厚度, 散热系统等均会影响产品温度。
请务必在最终应用时, 验证产品发热状况。



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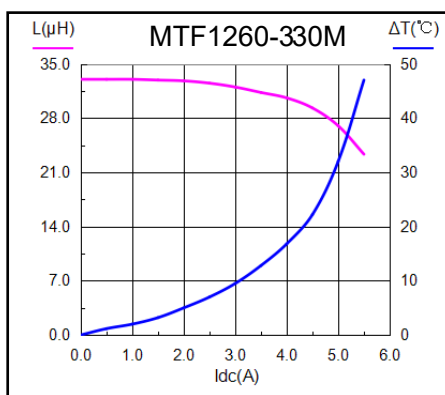
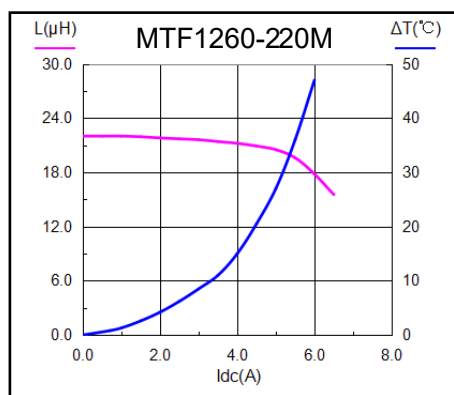
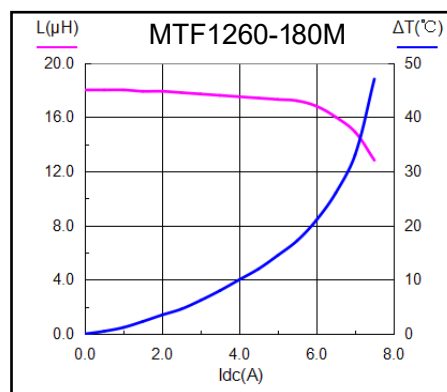
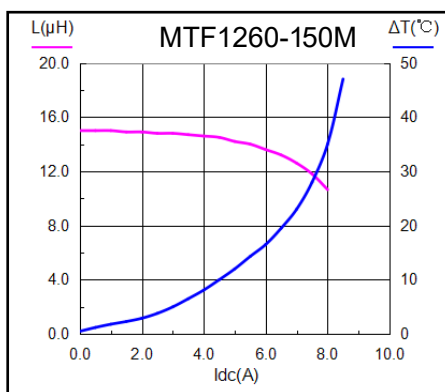
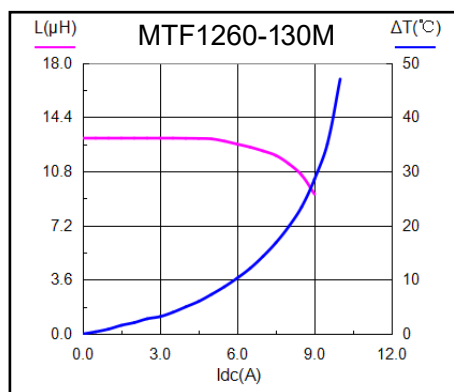
6 Saturation current VS temperature rise current curve

饱和电流 VS 温升电流曲线





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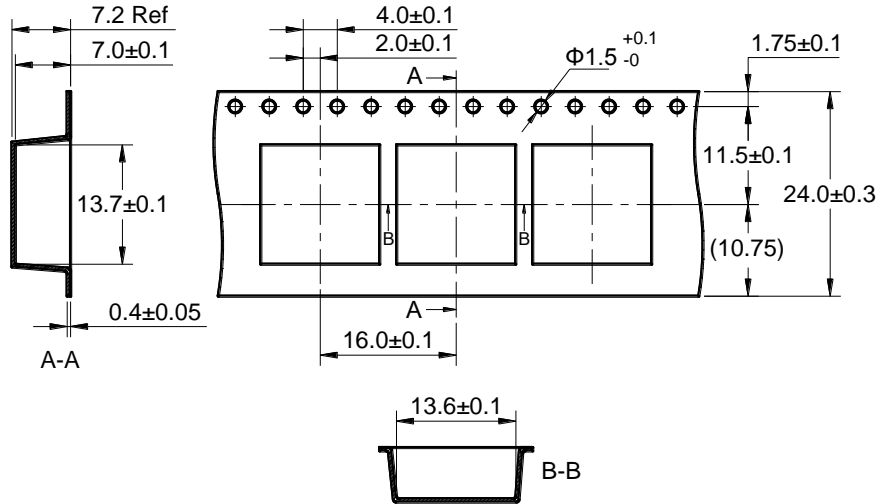
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7 Packing specification

包装规格

7.1 Carrier tape dimensions (mm)

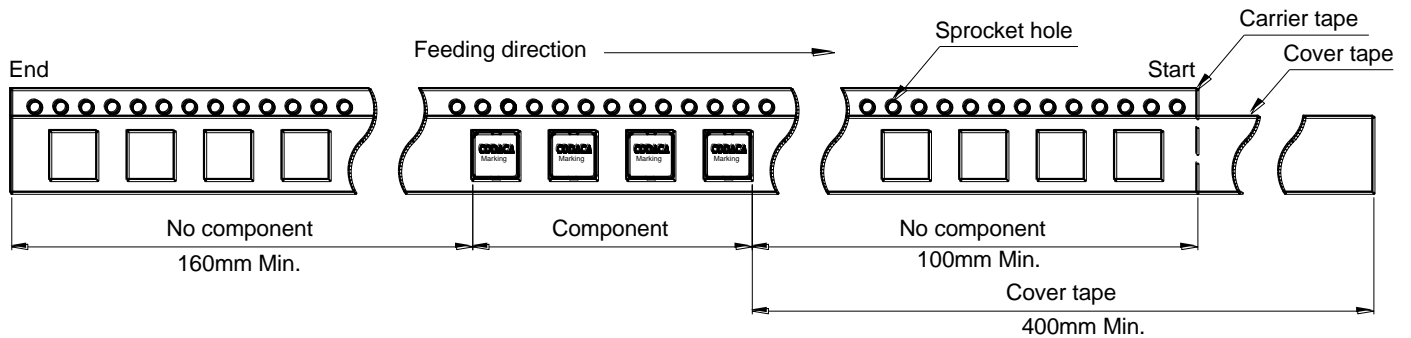
载带尺寸



※ 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

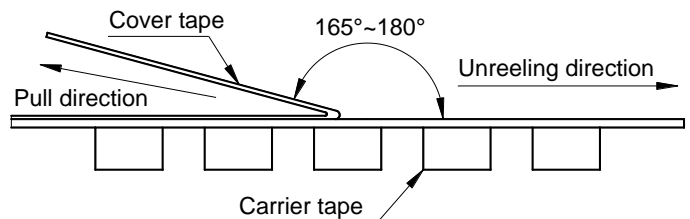
捆包方向



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。

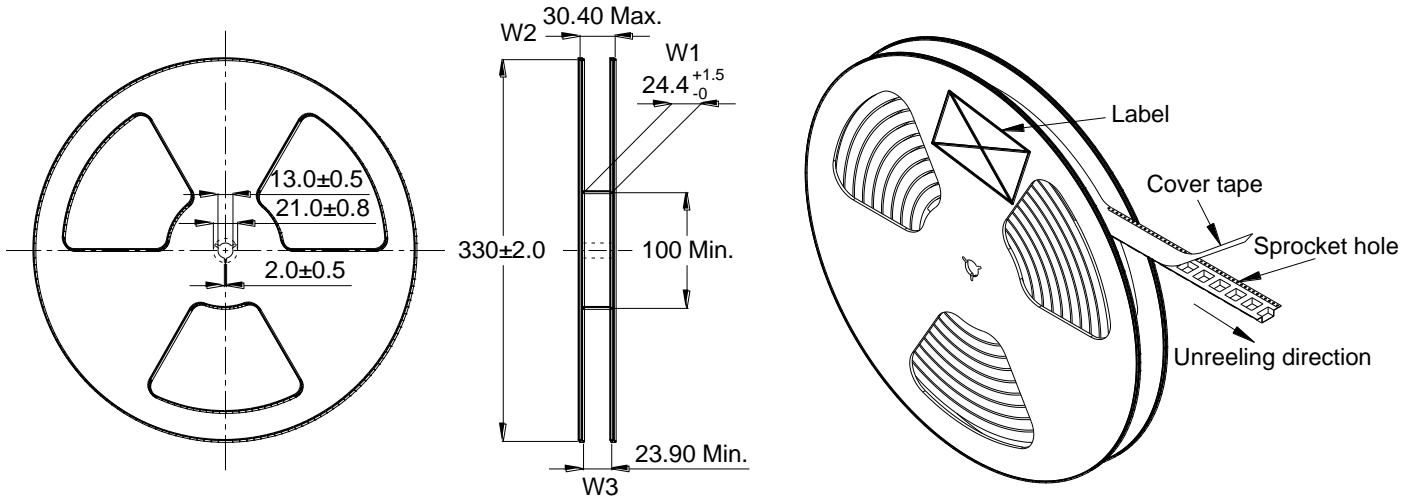




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7.4 Reel dimensions (mm)

卷盘尺寸



7.5 Carton dimensions

包装箱尺寸

- Inner Carton: 340×340×95mm
内包装盒
- Out Carton: 355×355×385mm
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
MTF1265	400pcs	800pcs = (2×400)	2400pcs = (3×800)

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



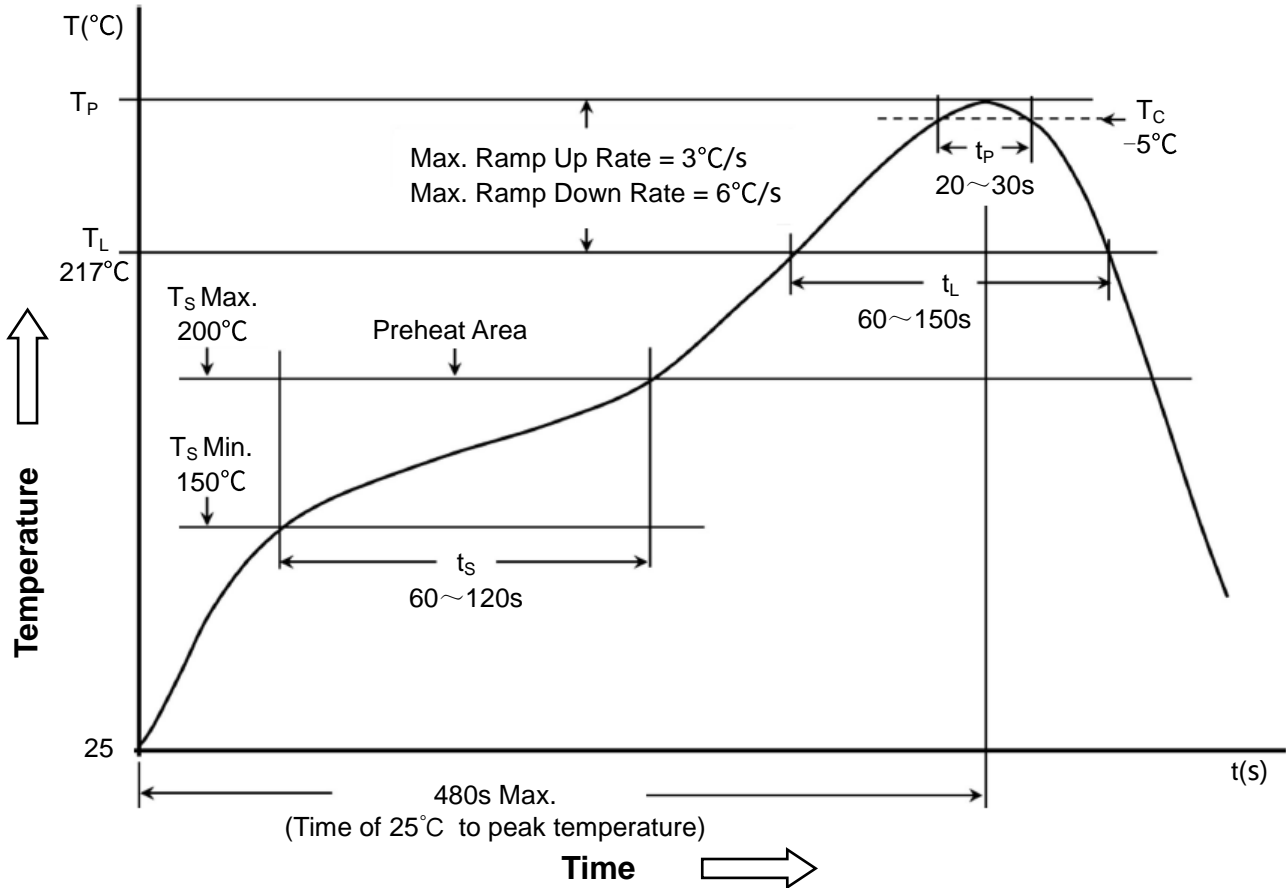
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8 Soldering specification

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 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。