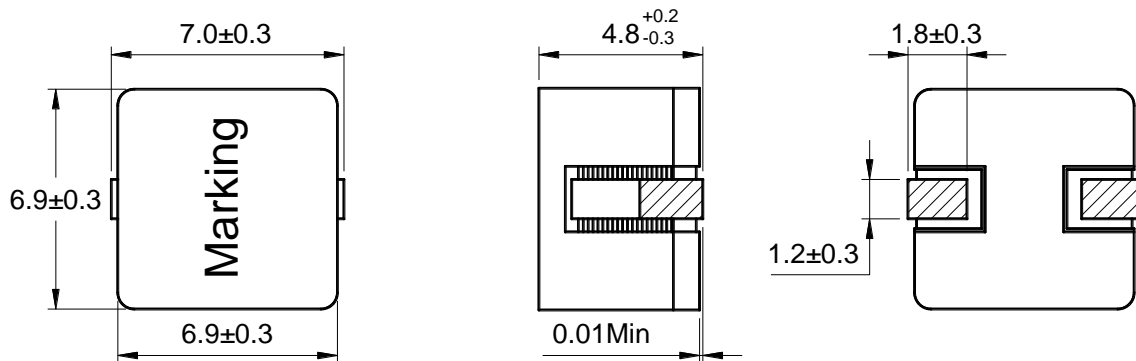


**Outline:  
产品概要**

- 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 : -40°C ~ +125°C (Including coil's temperature rise)  
工作温度：-40°C ~ +125°C (包含线圈发热)

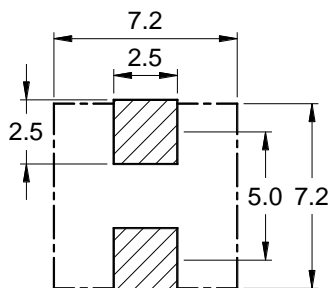
**1 Appearance and dimensions (mm)  
外形尺寸**



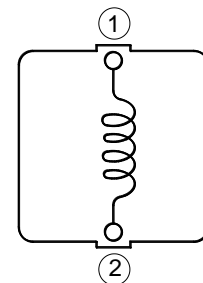
**2 Marking  
印字标识**



**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		
CSB0650-R24M	0.24	1.00	1.10	28.0	20.0
CSB0650-R47M	0.47	1.35	1.49	20.0	18.0
CSB0650-R76M	0.76	2.25	2.48	15.0	15.5
CSB0650-1R1M	1.10	3.15	3.47	13.0	15.0
CSB0650-1R5M	1.50	4.30	4.73	11.0	13.0
CSB0650-2R2M	2.20	5.85	6.44	9.00	11.5
CSB0650-3R3M	3.30	9.00	9.90	8.00	9.00
CSB0650-4R9M	4.90	14.5	16.0	6.50	6.50
CSB0650-6R5M	6.50	21.5	23.7	6.00	6.00
CSB0650-7R6M	7.60	28.2	31.0	4.80	4.20
CSB0650-8R5M	8.50	30.5	33.6	4.50	4.00
CSB0650-100M	10.0	33.0	36.3	4.00	3.50

■ 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。

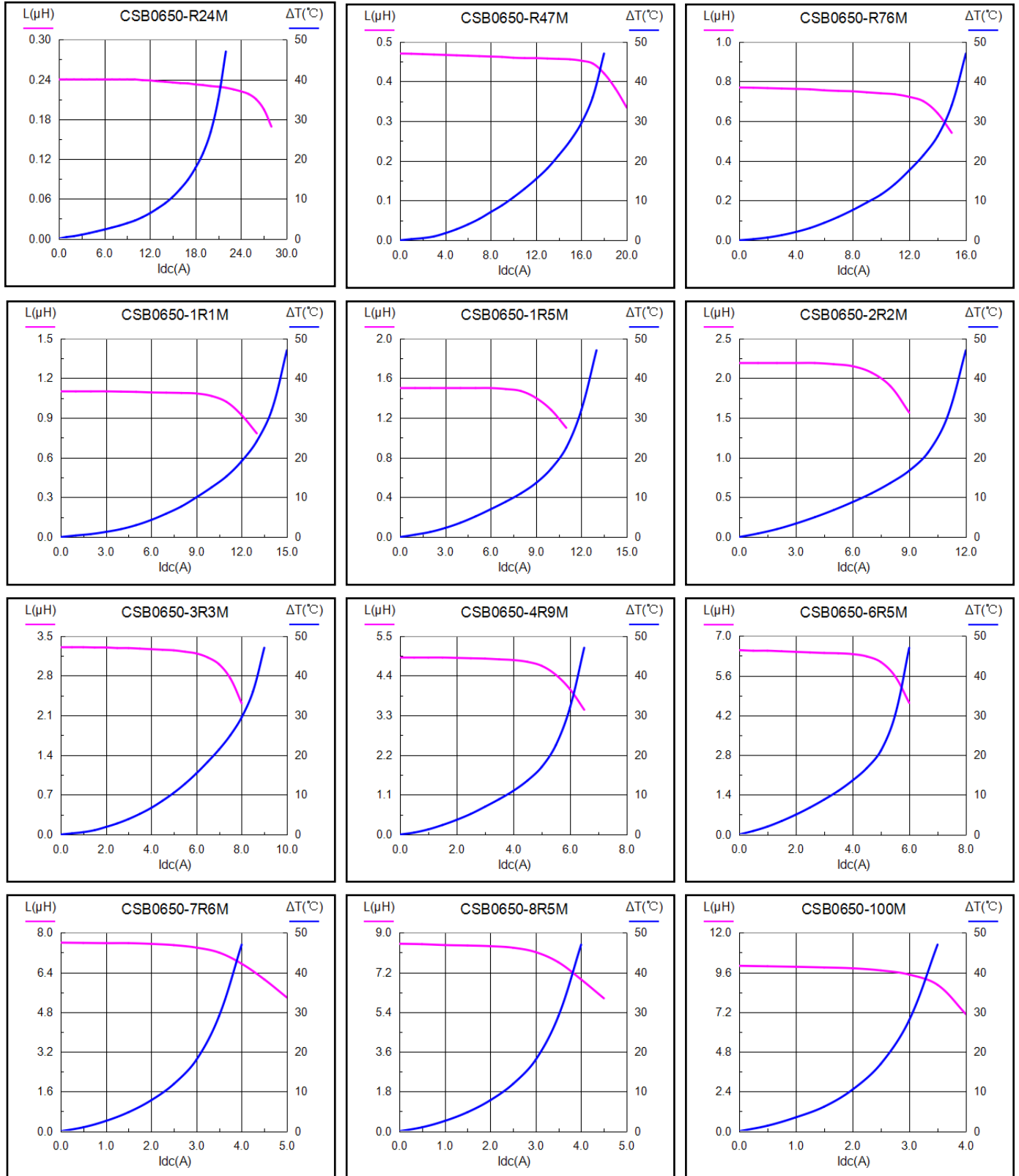
※1 Inductance measure condition at 100kHz, 0.1V.  
电感测试条件为 100kHz, 0.1V。

※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。

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

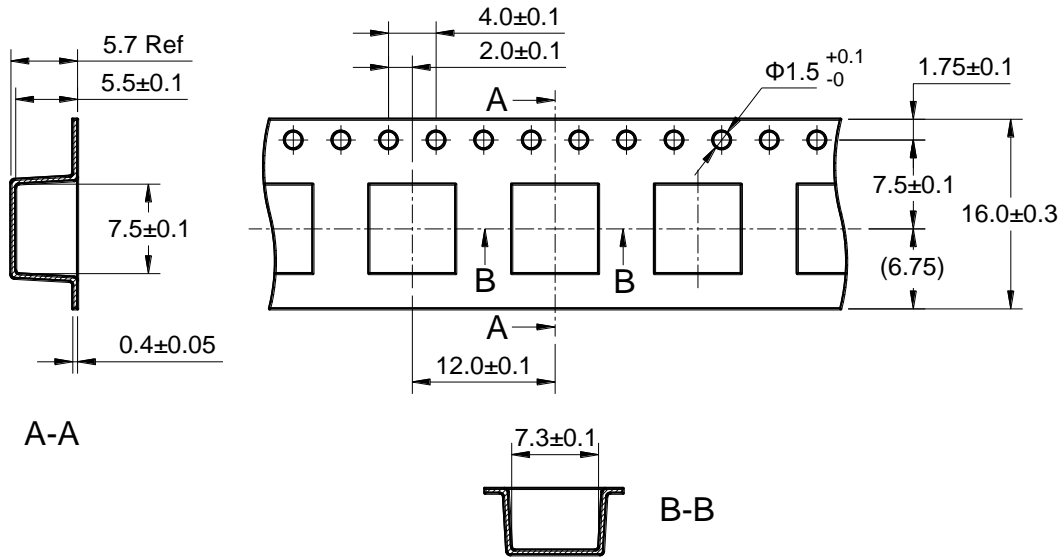


**7 Packing specification**

**包装规格**

**7.1 Carrier tape dimensions (mm)**

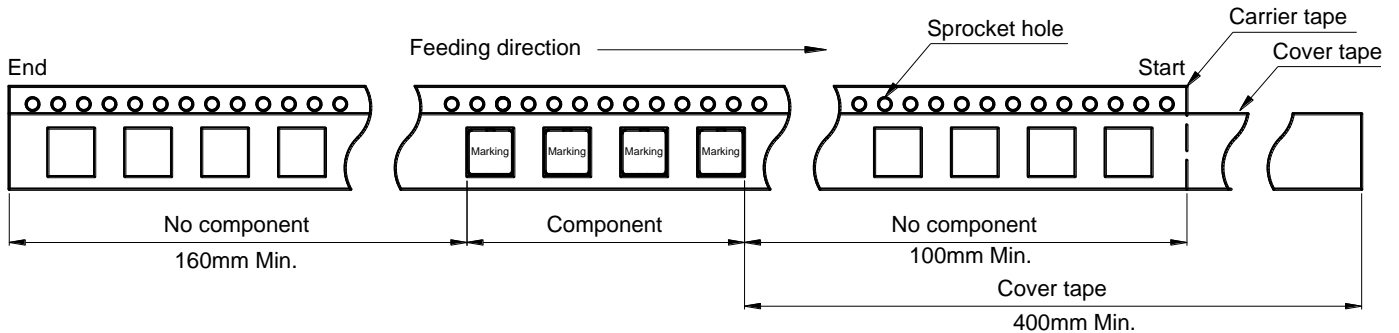
**载带尺寸**



※ 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**

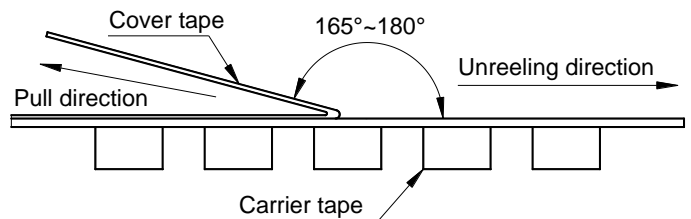
**捆包方向**



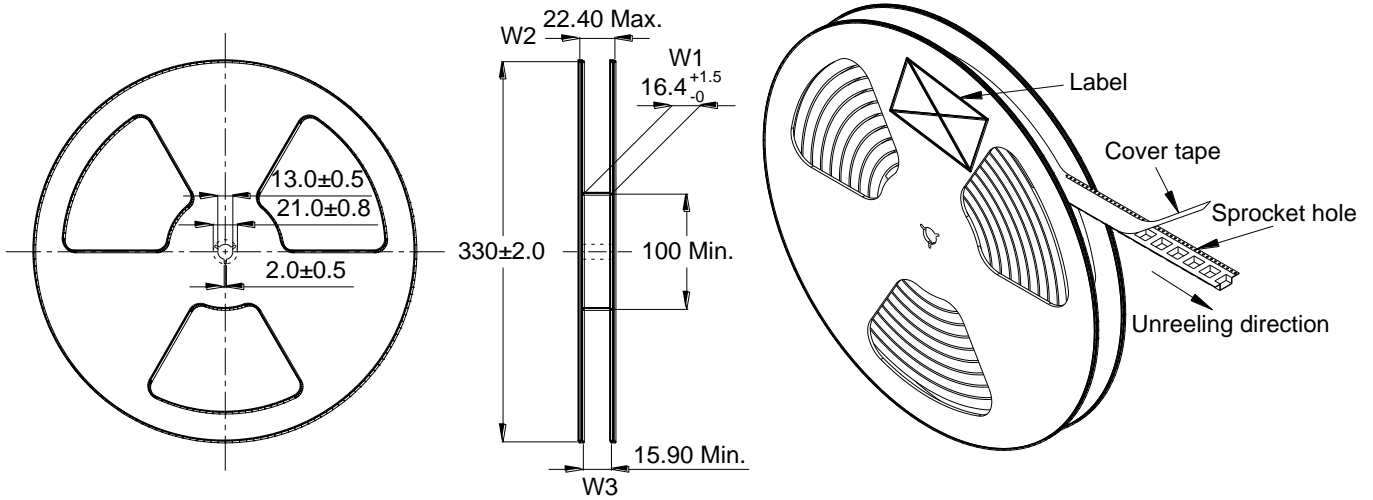
**7.3 Cover tape peel off condition**

**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: 340×340×95mm  
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
CSB0650	1000pcs	3000pcs = (3×1000)	9000pcs = (3×3000)

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

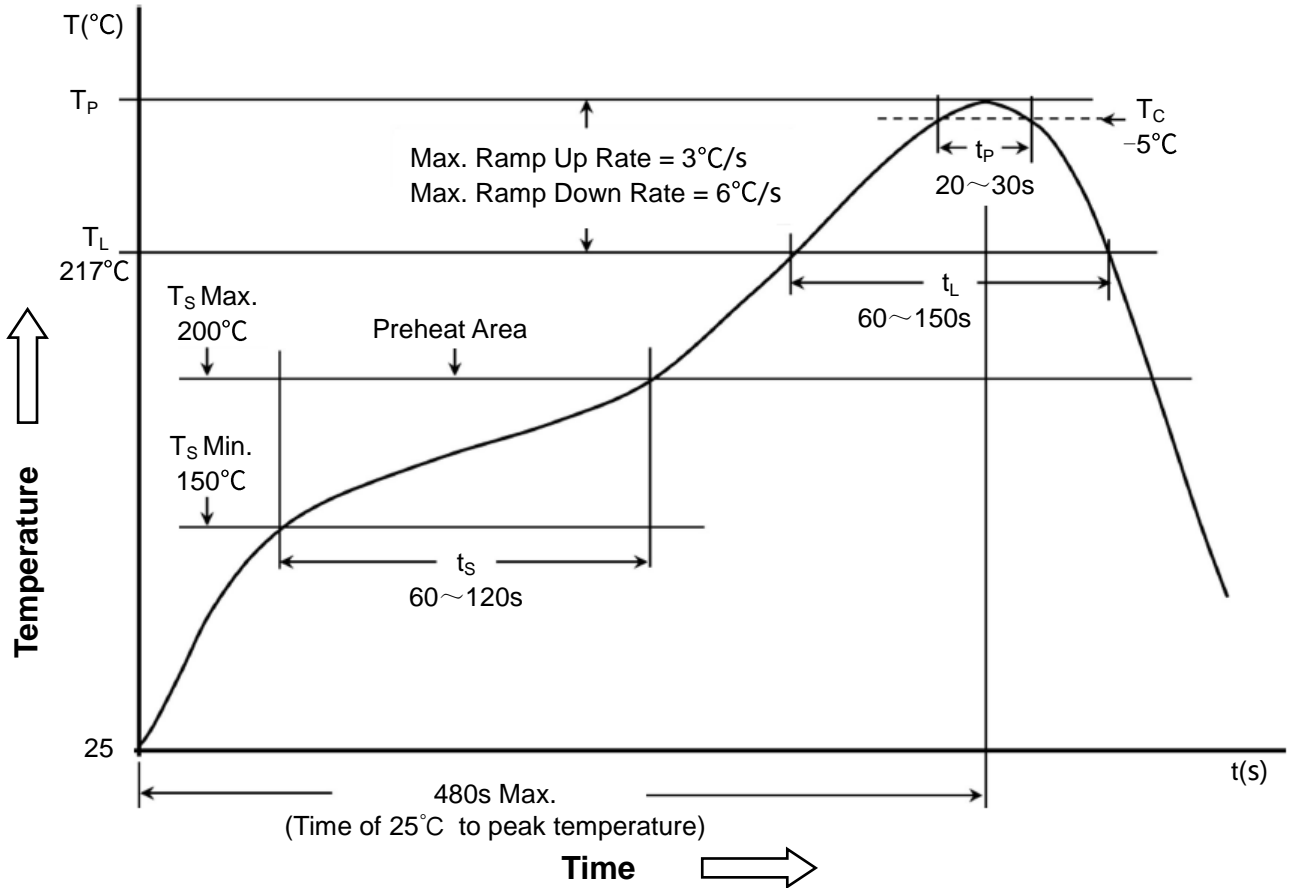
Shipping Label 运输标签
■ Customer Name 客户名称
■ Customer Part No. 客户型号
■ Supplier Part No. 供应商型号
■ Supplier Name 供应商名称
■ Country of origin 产品产地

**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 <sup>3</sup>	350~2000 mm <sup>3</sup>	>2000 mm <sup>3</sup>
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。