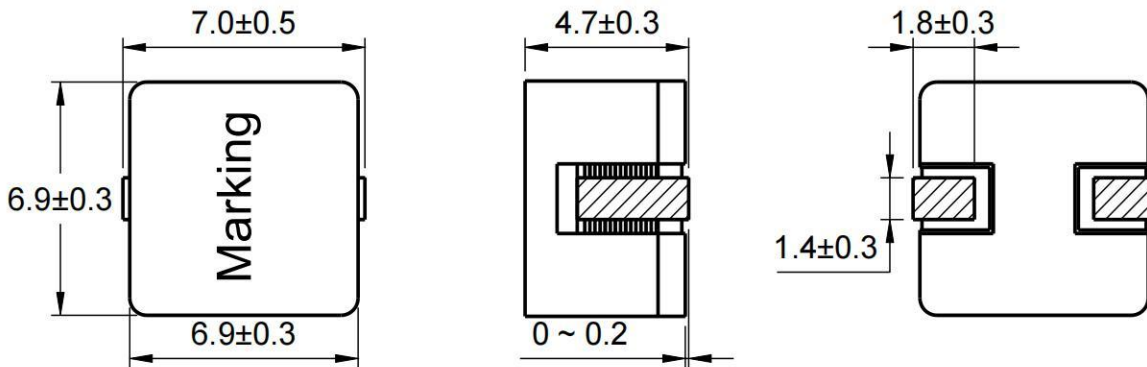


### Outline: 产品概要

- Magnetic shielded structure: excellent resistance to electro magnetic interference(EMI)  
磁屏蔽结构：抗电磁干扰(EMI)性能强
- 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°C ~ +150°C (Including coil's temperature rise)  
工作温度：-55°C ~ +150°C (包含线圈发热)

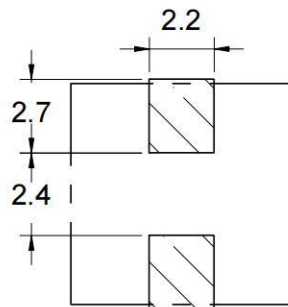
### 1 Appearance and Dimensions (mm) 外形尺寸 (mm)



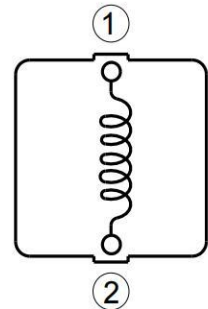
### 2 Marking 印字标识



### 3 Reference Land Pattern (mm) 参考基板尺寸 (mm)



### 4 Schematic 原理图





## 5 Electrical Characteristics

### 电气特性

Part No. 型号	Inductance ( $\mu$ H) 电感值 $\times 1$ $\pm 20\%$	D.C.R. (m $\Omega$ ) 直流电阻		Saturation current (A) 饱和电流 $\times 2$ Typical	Temperature rise current (A) 温升电流 $\times 3$ Typical
		Typical	Max		
YZBX0650-R25M	0.25	0.88	1.00	60.0	21.0
YZBX0650-R47M	0.47	1.36	1.56	39.0	18.0
YZBX0650-1R0M	1.00	3.55	4.10	27.0	15.0
YZBX0650-1R5M	1.50	4.10	4.75	22.5	13.5
YZBX0650-2R0M	2.00	5.57	6.40	19.5	11.8
YZBX0650-2R7M	2.70	7.10	8.20	16.5	10.3
YZBX0650-3R3M	3.30	8.50	9.80	15.3	9.00
YZBX0650-3R9M	3.90	12.3	14.2	14.0	8.00
YZBX0650-4R7M	4.70	14.8	17.0	12.7	6.50
YZBX0650-5R6M	5.60	19.2	22.1	11.4	6.20
YZBX0650-6R8M	6.80	20.5	23.6	10.3	6.00
YZBX0650-7R6M	7.60	20.5	23.6	8.30	6.00
YZBX0650-8R8M	8.80	21.6	24.9	7.90	4.80
YZBX0650-100M	10.0	26.5	30.5	7.40	4.40
YZBX0650-130M	13.0	38.6	44.4	6.50	3.10

- 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, 0.5V.  
电感测试条件为 100kHz, 0.5V。

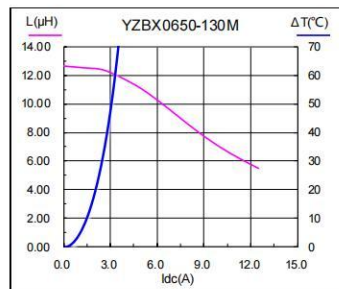
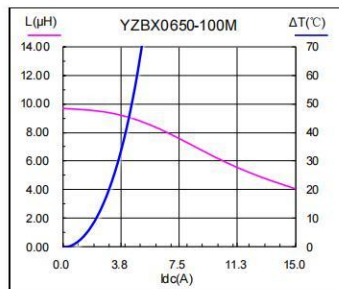
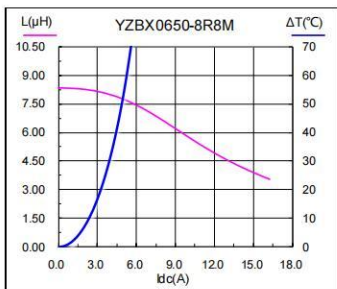
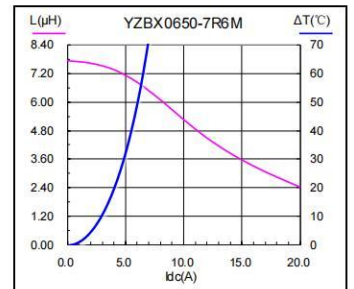
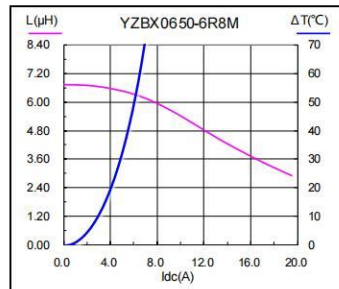
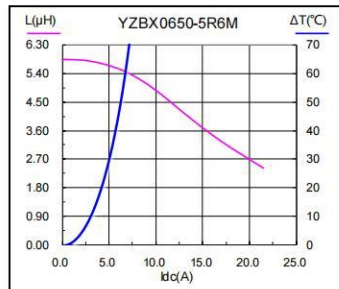
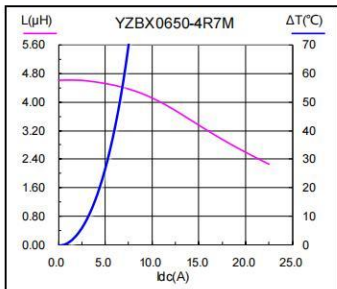
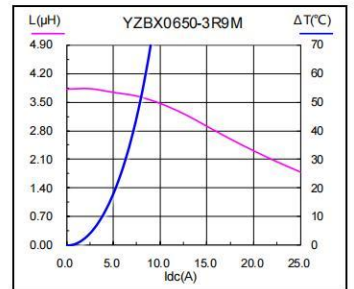
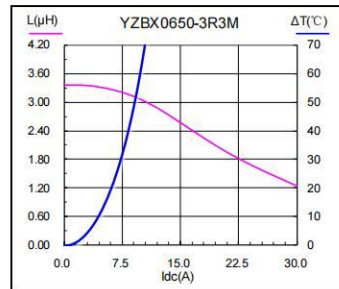
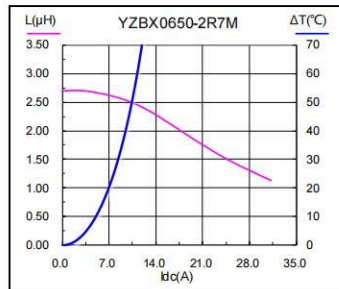
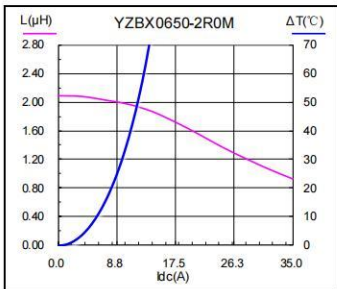
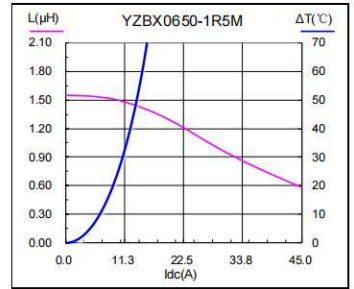
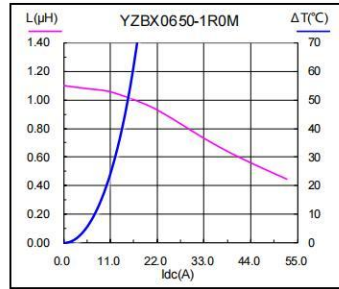
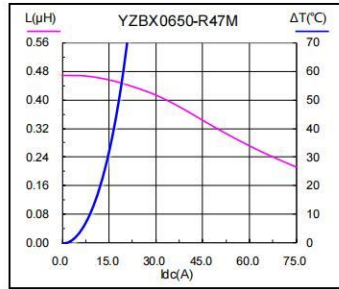
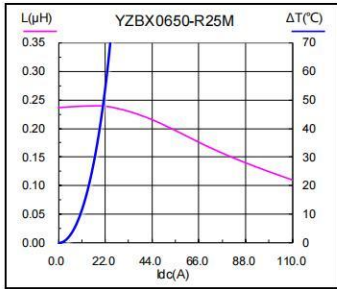
※2 Saturation current : the actual value of DC current when the inductance decrease 30% of its initial value.  
饱和电流 : 电感值下降其初始值的 30% 时所加载的实际直流电流值。

※3 Temperature rise current : the actual value of DC current when the temperature rise is  $\Delta T 50^{\circ}\text{C}$  ( $T_a = 25^{\circ}\text{C}$ ).  
温升电流 : 使产品温度上升到  $\Delta T 50^{\circ}\text{C}$  时所加载的实际直流电流值 ( $T_a = 25^{\circ}\text{C}$ )。

※ Special remind : Circuit design, component placement, PCB 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 (PCB) 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



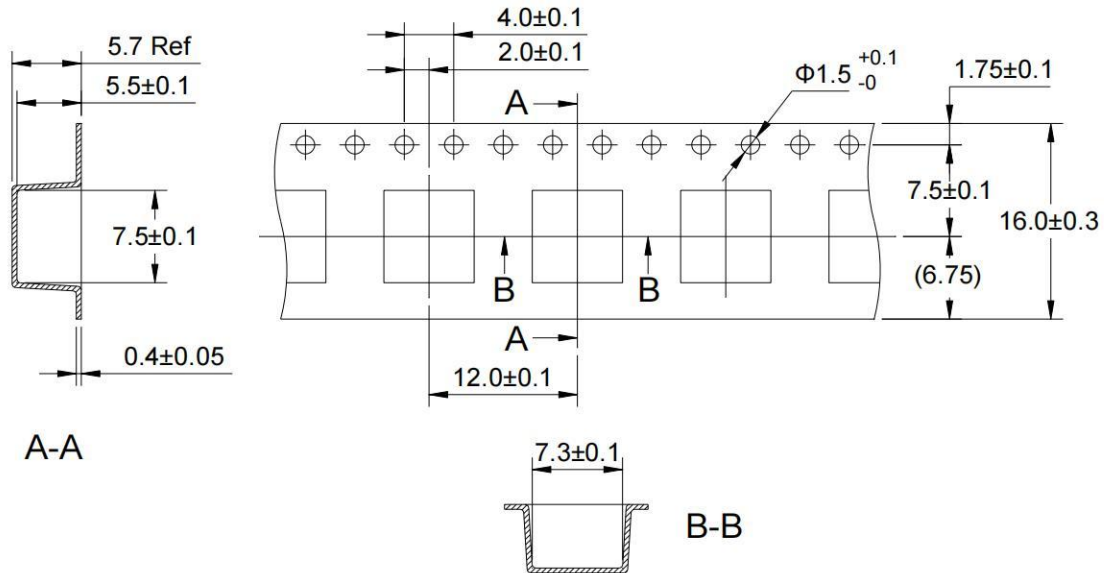


## 7 Packing Specification

### 包装规格

#### 7.1 Carrier Tape Dimensions (mm)

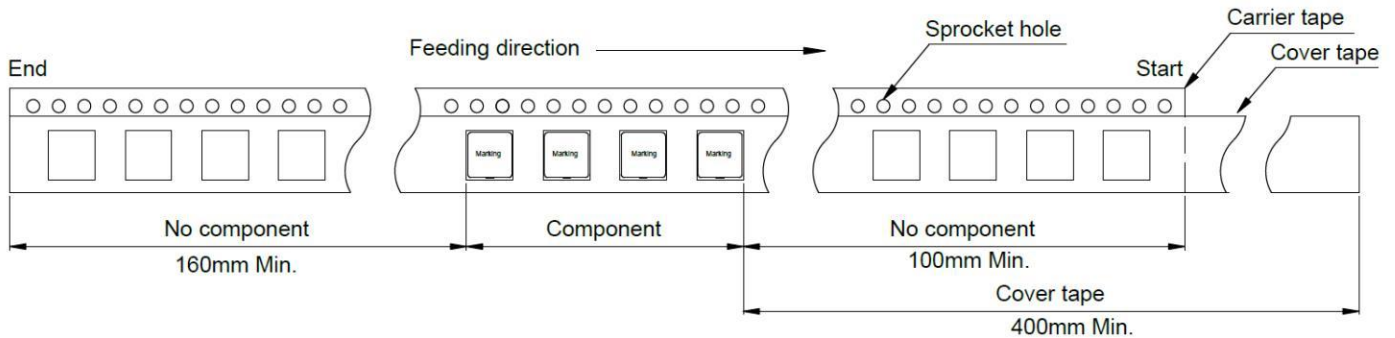
载带尺寸



※ 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

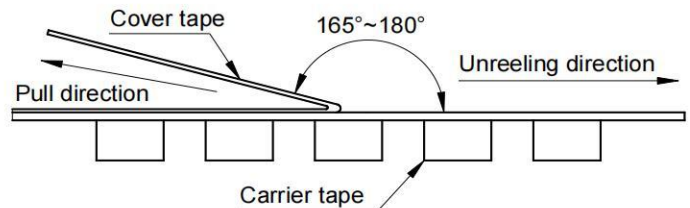
捆包方向



#### 7.3 Cover Tape Peel Off Condition

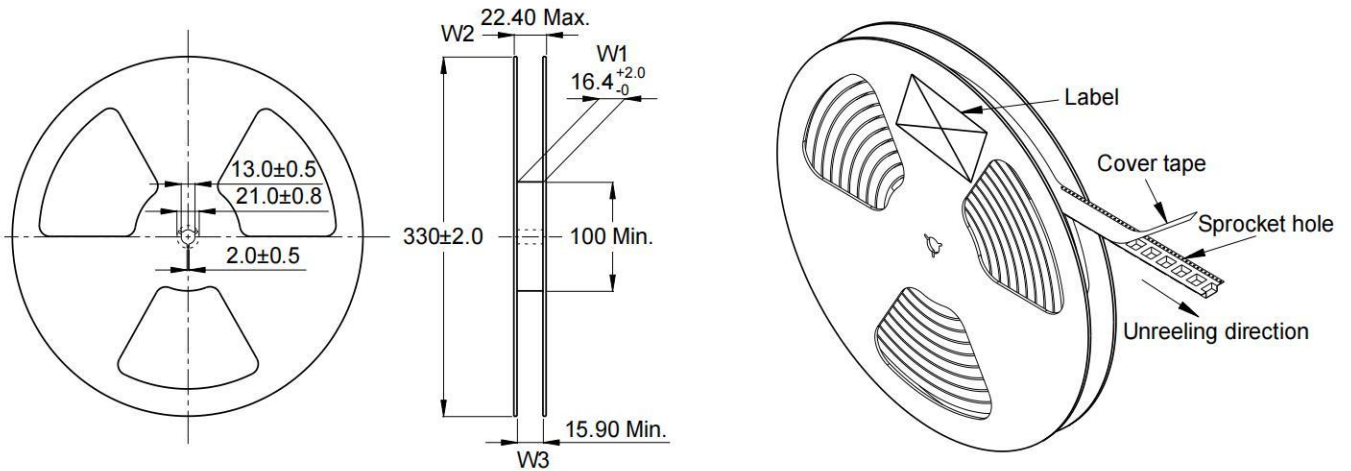
盖带剥离条件

- 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 : 360×360×370mm  
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 包装总数量
YZBX0650	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
■ Packing No. 包装流水号
■ Quantity 数量
■ Shipment Date 出货日期
■ Part No. 产品型号
■ Customer Part No. 客户型号
■ Customer Po No. 客户订单号

Shipping Label 运输标签
■ Packing No. 包装流水号
■ Quantity 数量
■ Shipment Date 出货日期
■ Part No. 产品型号
■ Customer Part No. 客户型号
■ Customer Po No. 客户订单号

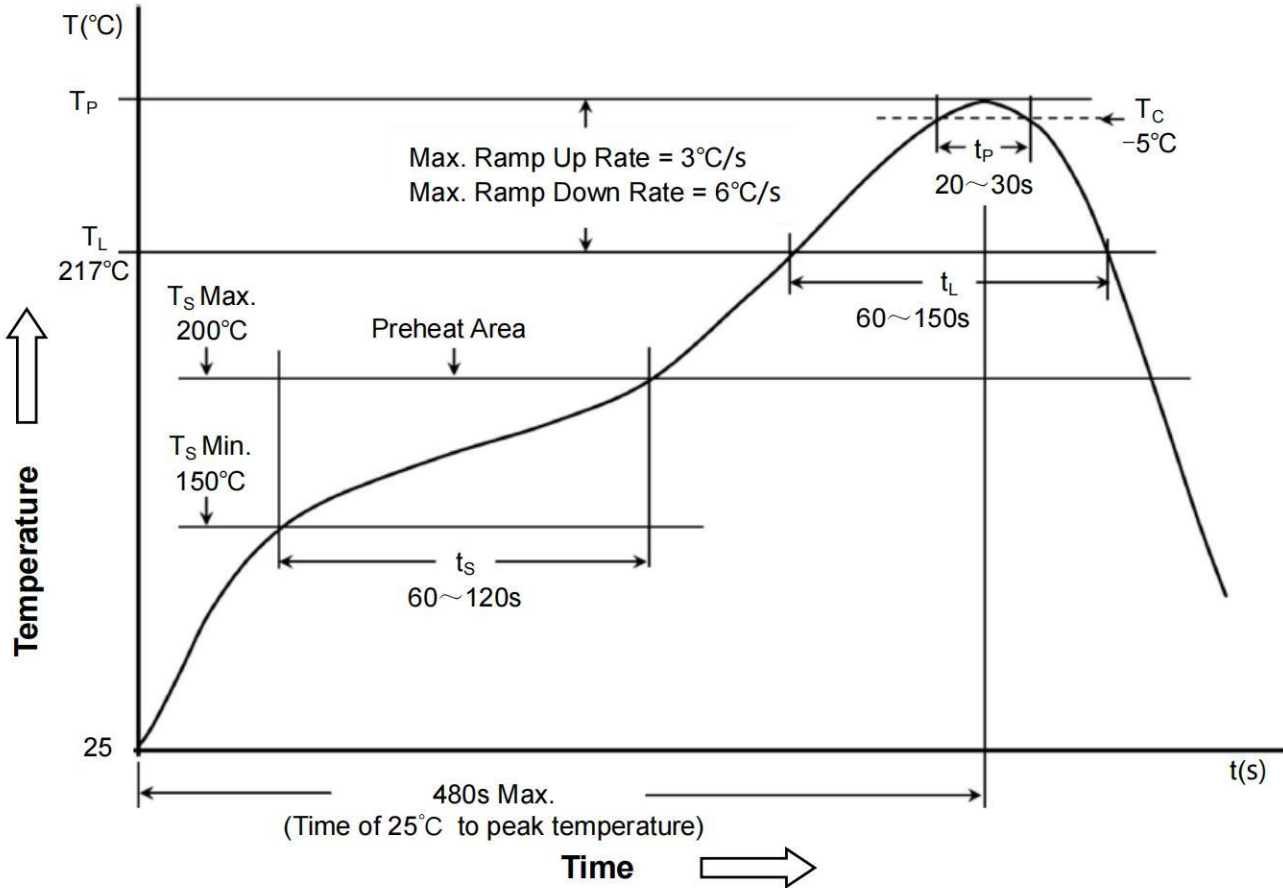


## 8 Soldering specification

### 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		
		$<350 \text{ mm}^3$	$350 \sim 2000 \text{ mm}^3$	$>2000 \text{ mm}^3$
PB-Free Assembly 无铅装配	$<1.6\text{mm}$	$260^{\circ}\text{C}$	$260^{\circ}\text{C}$	$260^{\circ}\text{C}$
	$1.6 \sim 2.5\text{mm}$	$260^{\circ}\text{C}$	$250^{\circ}\text{C}$	$245^{\circ}\text{C}$
	$\geq 2.5\text{mm}$	$250^{\circ}\text{C}$	$245^{\circ}\text{C}$	$245^{\circ}\text{C}$

※ Reflow is referred to standard IPC/JEDEC J-STD-020D.

回流焊参照标准 IPC/JEDEC J-STD-020D.