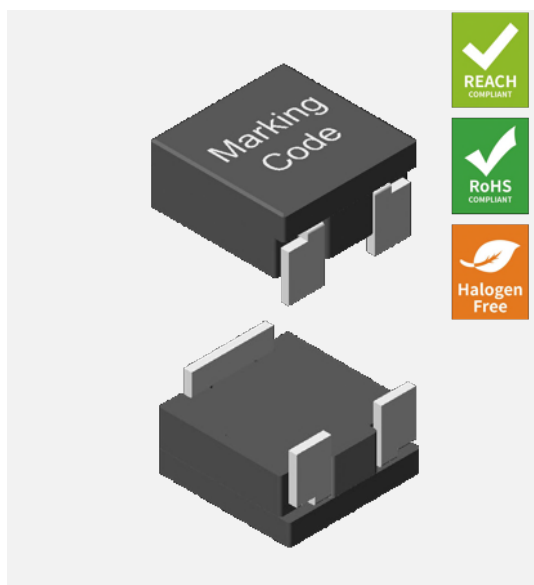




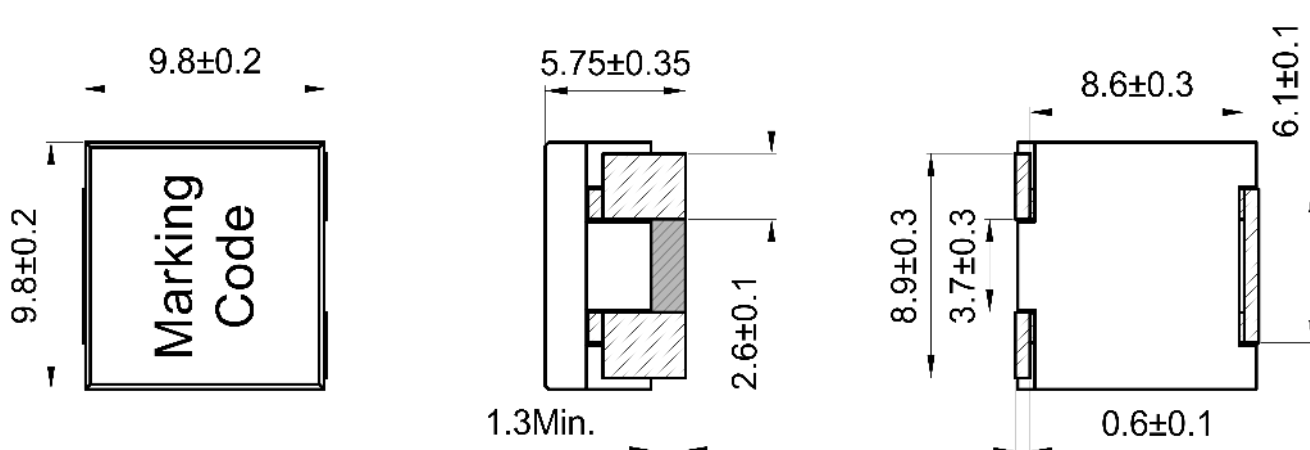
Outline:

产品概要

- High energy storage and Super low DCR, Low profile, SMD type.
高能量存储和超低直流电阻，小体积，SMD 型。
- Designed for high current power supply applications.
专为大电流电源应用而设计。
- High current DC-DC converters.
大电流 DC-DC 转换器。
- VRM, multi-phase buck regulators.
VRM, 多相降压调节器。
- PDA, Notebook computers, Routers, Servers, Battery powered devices, Telecom soft switches switches, Base stations.
PDA, 笔记本电脑, 路由器, 服务器, 电池供电设备, 电信交换机、基站。
- Operating temperature : $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$
(Including coil's temperature rise)
工作温度: $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$ (包含线圈发热)

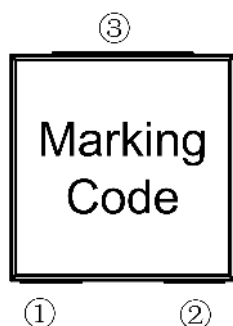
1 Appearance and Dimensions (mm)

外形尺寸(mm)



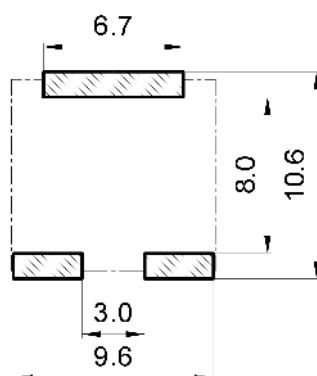
2 Marking

印字标识



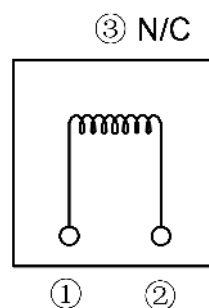
3 Reference Land Pattern (mm)

参考基板尺寸 (mm)



4 Schematic

原理图



※ Date code will be changed by manufacture date
生产日期代码将根据生产日期变动。

5 Electrical Characteristics

电气特性

Part No. 型号	Inductance (μ H) 电感值 ※1 $\pm 10\% \sim \pm 15\%$	D.C.R. (m Ω) 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		
TGQI1060-R10L	0.10	0.660	0.726	120.0	20.0
TGQI1060-R20L	0.20	0.660	0.726	60.0	20.0
TGQI1060-R30L	0.30	0.660	0.726	43.0	20.0
TGQI1060-R45L	0.45	0.660	0.726	29.0	20.0
TGQI1060-R50K※	0.50※	0.660	0.726	26.0	20.0

■ 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 1MHz, 1V, (K= $\pm 10\%$ tolerance. L= $\pm 15\%$ tolerance).

电感测试条件为 1MHz, 1V, (公差 K= $\pm 10\%$. 公差 L= $\pm 15\%$)。

※2 Saturation current: the actual value of DC current when the inductance decrease 20% of its initial value.

饱和电流: 电感值下降其初始值的 20% 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 $\Delta T 40^\circ\text{C}$ ($T_a = 25^\circ\text{C}$).

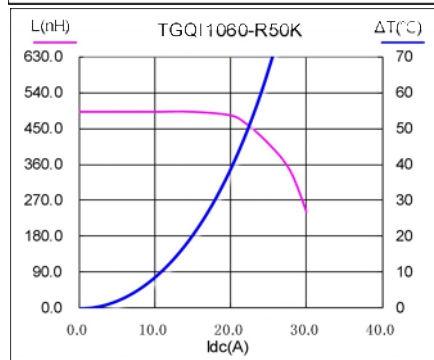
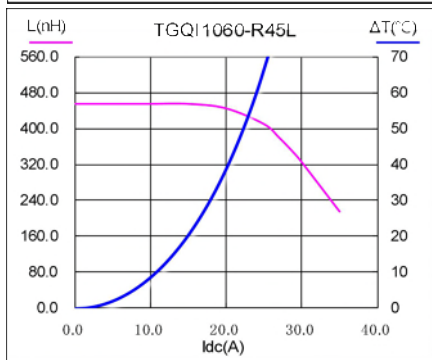
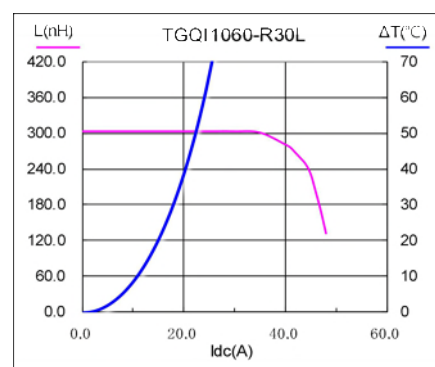
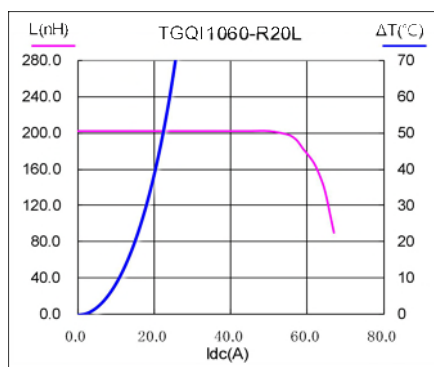
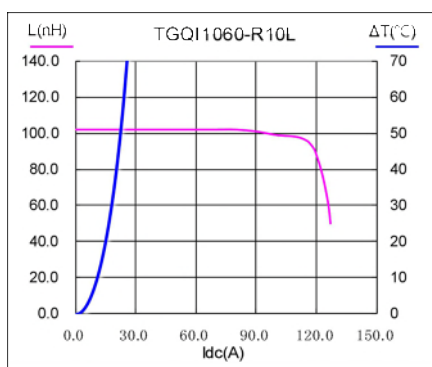
温升电流: 使产品温度上升到 $\Delta T 40^\circ\text{C}$ 时所加载的实际直流电流值 ($T_a = 25^\circ\text{C}$)。

※ 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

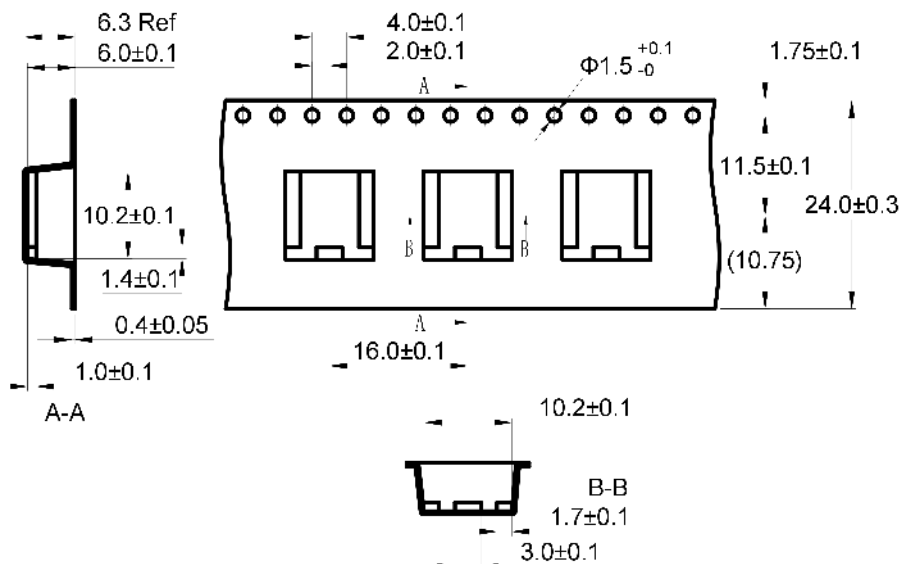


7 Packing Specification

包装规格

7.1 Carrier Tape Dimensions (mm)

载带尺寸(mm)

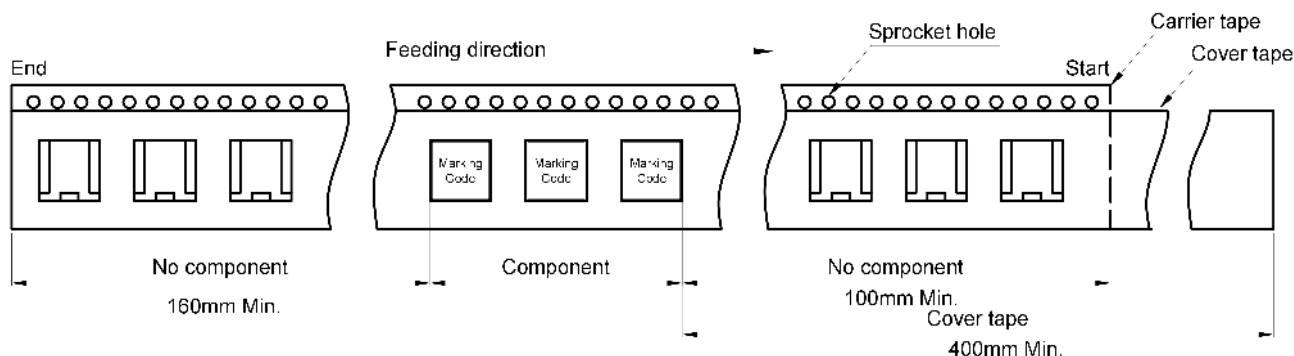


※ Packing is referred to the international standard IEC 60286-3.

包装参照国际标准 IEC 60286-3。

7.2 Tape Direction

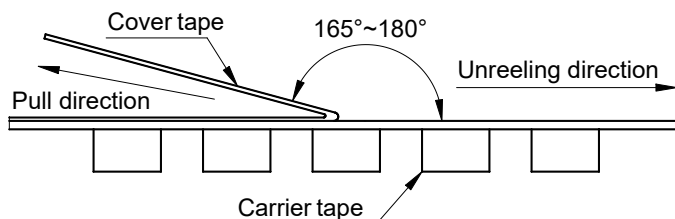
捆包方向



7.3 Cover Tape Peel Off Condition

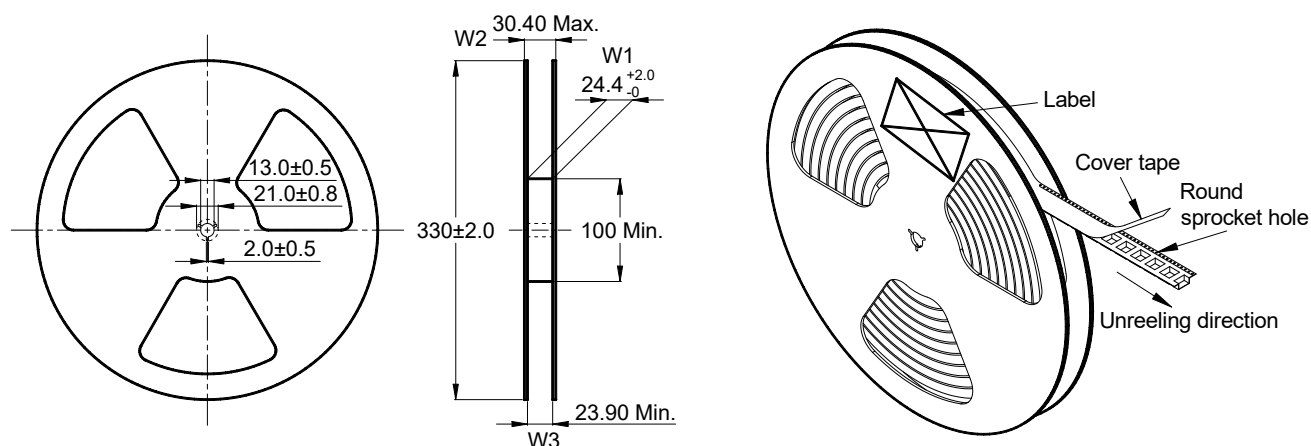
盖带剥离条件

- 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(mm)



7.5 Carton Dimensions and Packing Quantity

包装箱尺寸和包装数量

■ Inner Carton: 340×340×95mm
内包装箱

■ 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 包装总数量
TGQI1060	600pcs	(600×2) = 1200pcs	(1200×3) = 3600pcs

7.6 Label Making

标签标识

The following items will be marked on the tray of product label and shipping label.

以下项目将明确标识于产品吸塑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

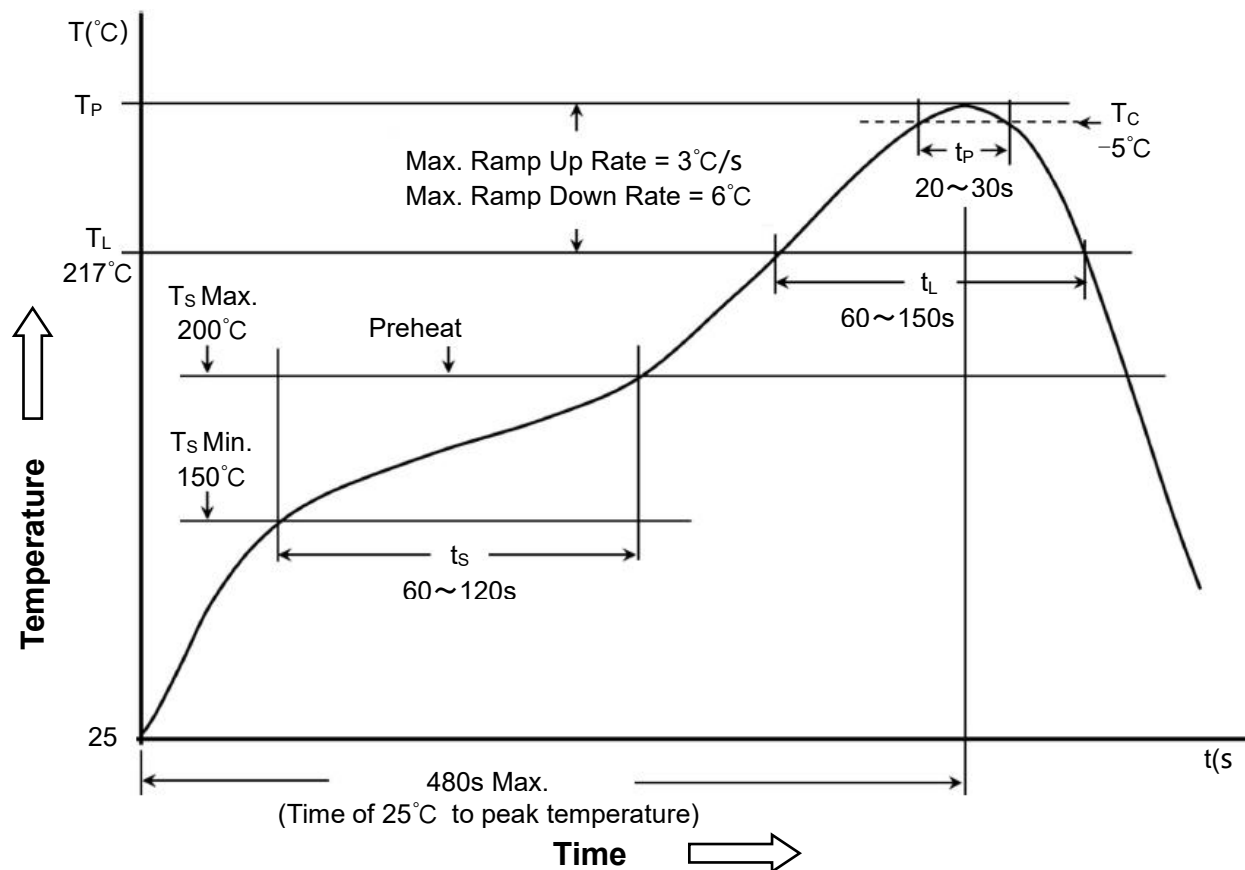
- Packing No.
包装流水号
- Quantity
数量
- Shipment Date
出货日期
- Part No.
产品型号
- Customer Part No.
客户型号
- Customer Po No.
客户订单号

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 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。