

产 品 承 认 书

Specification for Approval

客 户 Customer	:	
客户料号 Customer P/N	:	
物料名称 Item Name	:	
感通料号 GanTong P/N	:	GWPR5020S100M
承认书编号 Spec No.	:	S22092225
版本号 Version No.	:	A0

制 造 商 Manufacture	
拟 制 Prepared	师高鹏
审 核 Checked	王康
批 准 Approved	田一
日 期 Date	2022.09.22

客 户 承 认 Approved by Customer	
批 准 Approved	
日 期 Date	

备 注:
Remark

1. 在使用产品前，用户必须确认此产品是否适用于自身设计，感通仅保证产品符合此份承认书的规格。
Before use, customer should confirm whether this product is suitable for their design, SGTE only ensure products meet this specification.
2. 本承认书的数据更改，必须经双方确认，任何一方单独修改无效。
This specification data change must be confirmed by both parties, any individual modification is invalid.
3. 如客户未回签承认书即下订单，则视为承认此份承认书。
If customer placed orders without signing back this specification, it is regarded as recognition.



变更履历
Revision History

版本号 Revision	变更日期 Changed Date	申请者 Request By	变更内容 Change Content

1 料号定义

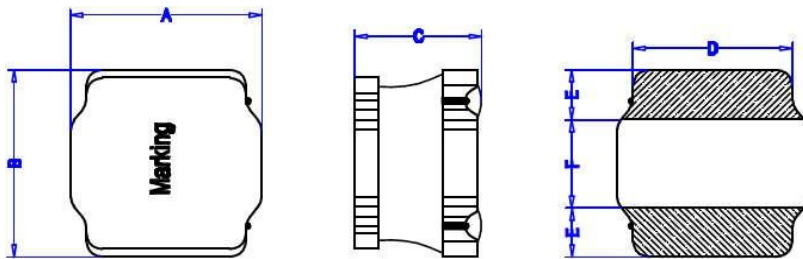
Part No. definition

GWPR **5020** **S** **100** **M**
 ① ② ③ ④ ⑤

- ① 产品代码 : 贴片电感
Product Code
 - ② 产品尺寸 : 5.0×5.0×2.2mm
Dimension
 - ③ 特征类型 : S=标准型 Standard
Feature type
 - ④ 电感值 : 例 1R0 = 1.0uH 100 = 10uH
Inductance
 - ⑤ 公差范围 : M = ±20% N = ±30%
Tolerance
- ※ 工作温度范围: -40°C ~ +125°C (包含产品发热)
Operating temperature range : -40°C ~ +125°C (Including self-temperature rise)

2 外形尺寸(mm)

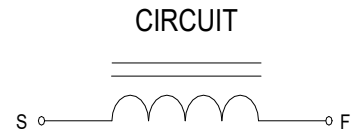
Appearance and dimensions



A	B	C	D	E	F
5.0±0.2	5.0±0.2	2.2Max	4.0±0.3	1.25±0.3	2.3±0.4

3 原理图

Schematic



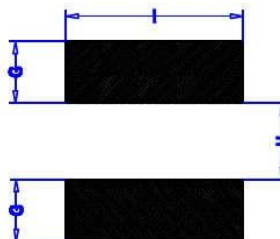
4 印字标识

Marking

※ XXX : 感值

5 参考基板尺寸(mm)

Reference PCB pattern



I: 4.2typ

G: 1.4typ

H: 2.3typ

6 电气特性

Electrical characteristics

料号 Part No.	Inductance (μH) ※1	Tolerance ($\pm\%$)	DCRm Ω $\pm 30\%$	Isat (A) ※3	Irms (A) ※2	Test Condition	MARKING
GWPR0520S100M	10	20	125	1.80	1.50	100KHz /0.25V	100

※ All data is tested on 25°C ambient temperature.

※1、Inductance is tested at 100KHz, 0.25V.

※2、Heat rating current: The value of DC current when product temperature rise is $\Delta T40^\circ\text{C}$ ($T_a=25^\circ\text{C}$).

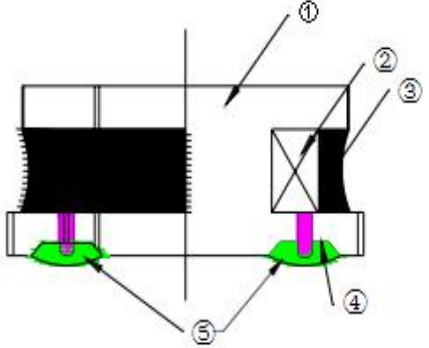
※3、Saturation current: The value of DC current when the inductance decreases 30% of its initial value.

※4、Special remind: Circuit design, component placement, frequency, cooling system and etc.all will affect the product temperature. Please verify the actual product temperature in the final application.

※5、Vibration test: Inductance deviation is within $\pm 10.0\%$ after 1 hour sweeping vibration in each three directions, namely, forward and backward, up and down, right and left. The frequency is 10~55~10Hz and the amplitude of 1 minute cycle is 1.5mm PP.

※6、Construction and materials

※7、Through the AEC - Q200, Please consult for details.

	No.	Part name	Material	Ceaiya P/N
	①	Drum Core	Ni-Zn Ferrite Core	TW/BQ/CY
	②	Wire	Polyurethane enameled copper wire	YLSL
	③	Adhesive	Epoxy Resin Magnetic Powder	
	④	Plating Electrodes	Plating: Ag 10-20 μm Ni 1-3 μm Sn 3-7 μm	
⑤	Outer Electrodes	Top surface solder coating Sn99%、Ag0.3%、Cu0.7%	YX	

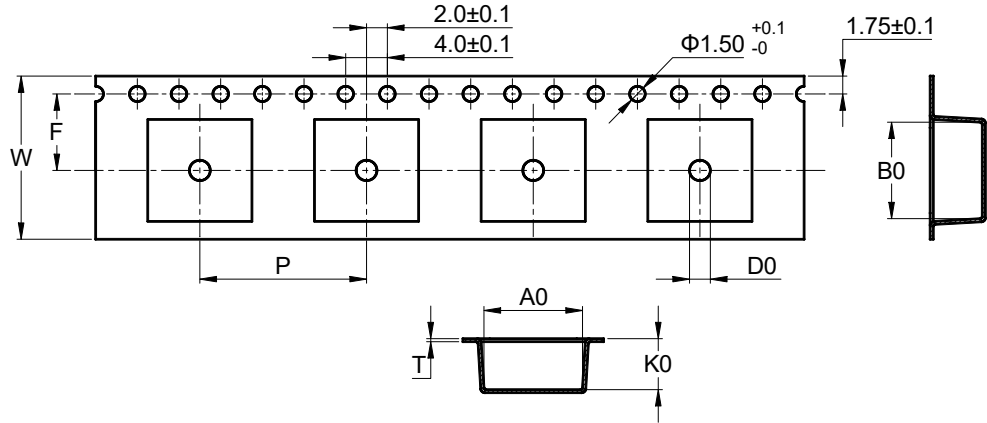
7、包装规格

Packaging specification

7.1 载带尺寸(mm)

Carrier tape dimensions

A0	5.4±0.1
B0	5.4±0.1
K0	2.2±0.1
W	12.0±0.3
P	8.0±0.1
F	5.5±0.15
T	0.35±0.05
D0	N/A

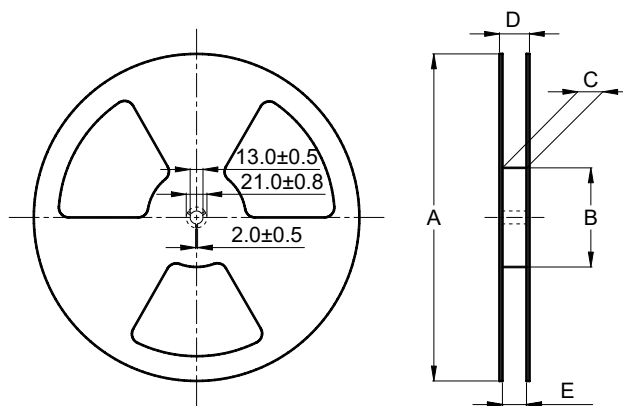


※ 包装参照国际标准 IEC 60286-3。
Packaging is referred to the international standard IEC 60286-3.

7.2 卷盘尺寸(mm)

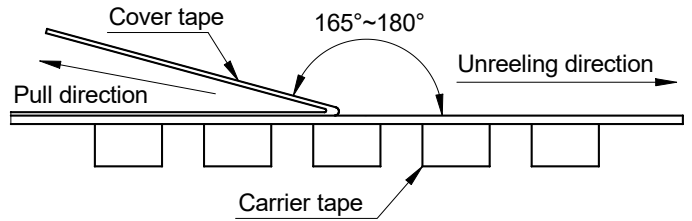
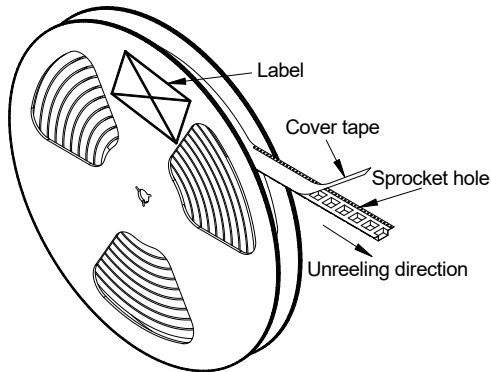
Reel dimensions

A	330 ± 2.0
B	100 Min
C	12 +2.0/-0
D	16.4 Max
E	12.4 Min



7.3 盖带剥离条件

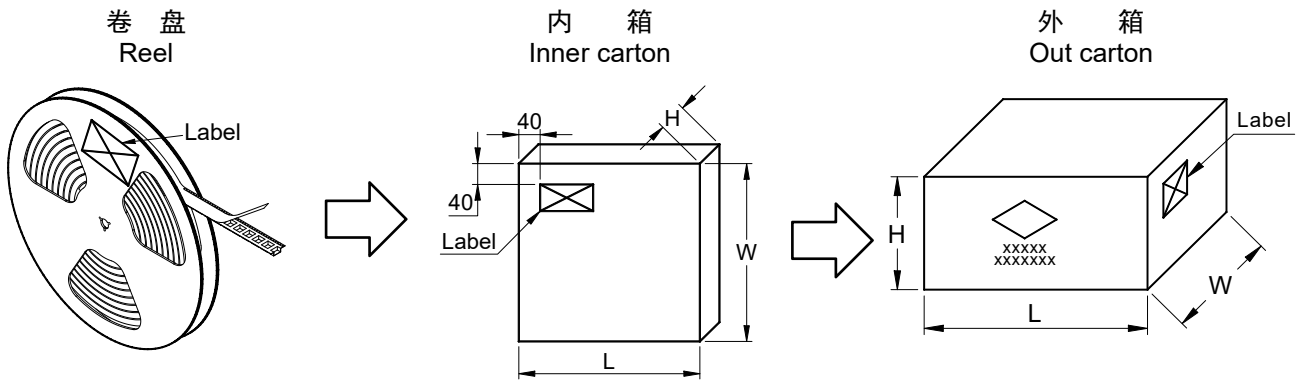
Cover tape peel-off condition



- ※ 盖带剥离力度为 0.2~1.3N。
Cover tape peel-off force will be 0.2 to 1.3N.
- ※ 参考剥离速度 300±10mm/分钟。
Reference peel-off speed 300±10mm/min.

7.4 包装箱尺寸和包装数量

Carton dimensions and packaging quantity



■ 内包装箱(L×W×H): 350×335×37mm
Inner Carton

■ 外包装箱(L×W×H): 365*345*290mm
OutCarton

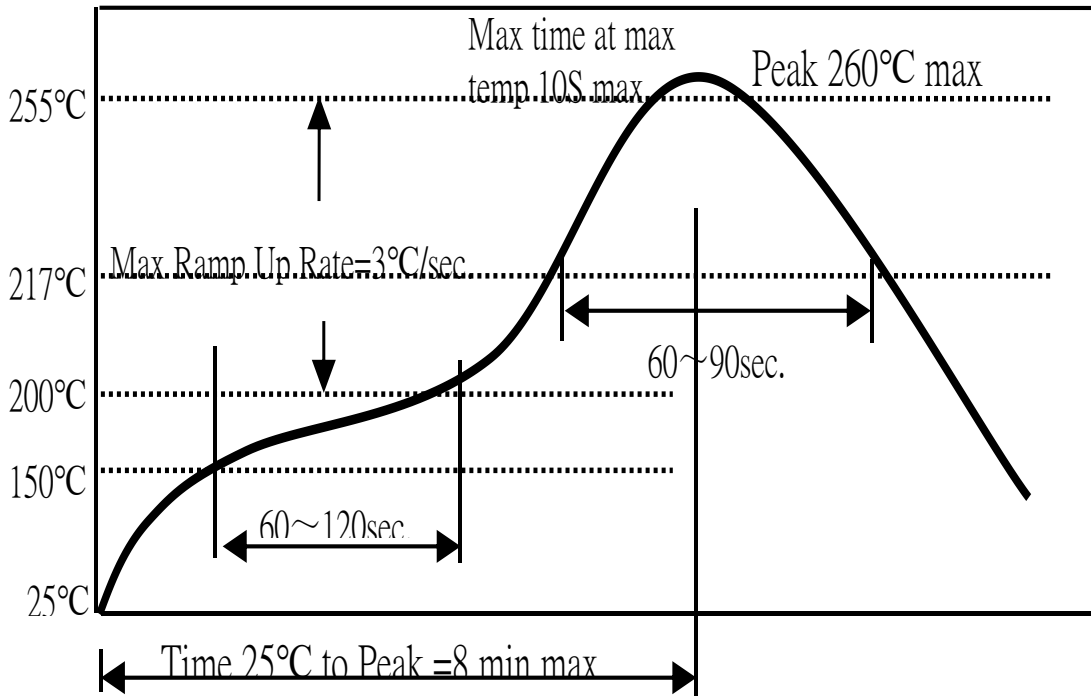
GWRP5020S	每盘 包装数量 Per Reel Quatity	内箱 包装数量 Inner Carton Quatity	外箱 包装数量 Out Carton Quatity
	3000 pcs	(3000×3) =9000 pcs	(9000×3) = 27000pcs

8 回流焊焊接规范

Reflow soldering specification

8.1 SMT 回流焊温度曲线

Reflow profile for SMT components



8.2 封装体积与峰值温度(T_P)关系分类

Classification of peak package body temperature (T_P)

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

※回流焊参照标准 IPC/JEDEC J-STD-020D。

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