



Tengxiang Technology.Inc

东莞市腾祥电子有限公司

Product Number:AN2400-PCB55GX

Product Name: Antenna

Specification For Approval

Date: 2024.1.5

Version: 1.0

客户名称

Customer:

九安

客户料号

Customer P/N:

腾祥料号

T X P/N:

AN2400-PCB55GX

规格描述

Description :

2.4G PCB 天线 1.13mm 灰色线 L=200mm+IPEX

Tengxiang Checked By: 腾祥审核		Customer Approved By: 客户审核	
DRAWN 制 作	路婷	TESTED BY 检 测	
CHECKED BY 审 核	胡超	CHECKED BY 审 核	
Q.C.DEPT. 品 管	方伟明	Q.C.DEPT. 品 管	
APPROVED BY 核 准	韦佳	APPROVEDBY 核 准	



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Product Number:AN2400-PCB55GX

Product Name: Antenna

Index:

- 1. Specification (规格)
- 2. Characteristics and Reliability Test (产品特性和可靠性测试标准)
- 3. Antenna - S Parameter Test Data (样品测试数据)
- 4. Antenna - Radiation Pattern Test Data (辐射模式测试数据)
- 5. Mechanical and Packing Drawing (图纸包装规范)

Revision History (变更履历)

Revision	Date	Change Notification	Description
1.0	2024.1.5	初版	

Product Number:AN2400-PCB55GX

Product Name: Antenna

1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency 频率	2400-2500 MHz
S.W.R. 驻波比	≤ 2.0
Antenna Gain 增益	5.06dBi
Polarization 极化方式	Linear
Impedance 阻抗	50 Ohm
B. Material & Mechanical Characteristics	
Cable Type 线材规格	OD1.13mm ,gray
Connector Type 连接器规格	I-PEX
C. Environmental	
Storage Temperature 存储温度	- 40°C ~ +80 °C
Operation Temperature 工作温度	- 40°C ~ +80 °C

Product Number:AN2400-PCB55GX

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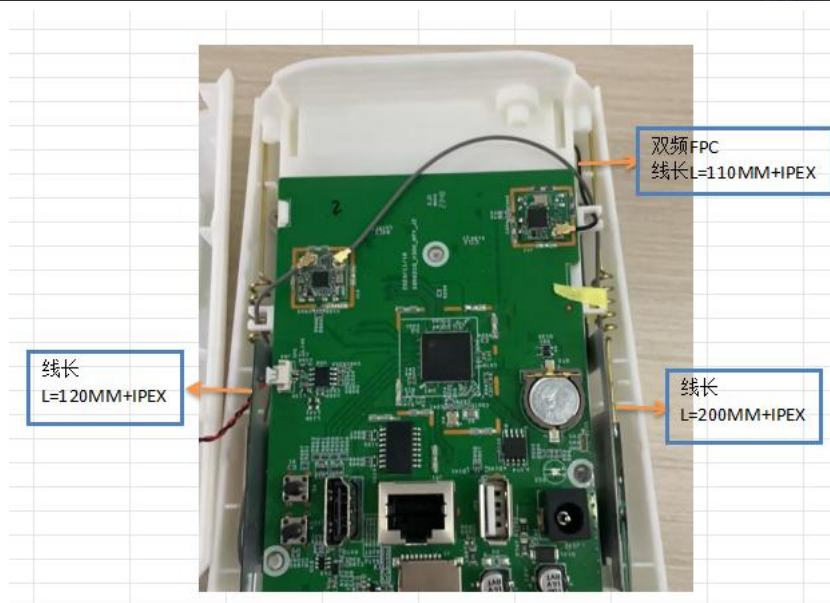
2. Characteristics and Reliability Test

Test Items 测试项目		Test Condition and Procedure 测试方法	Requirements 要求	Result 结果
1	V.S.W.R. 电压驻波比	Set DUT on Network Analyzer; make individual calibration to test 设置网络分析仪参数进行测试	Directive DUT specification 符合待测物规范	PASS
2	Insertion Loss 插入损失	Set DUT on Network Analyzer; make individual calibration to test 设置网络分析仪参数进行测试	Directive DUT specification 符合待测物规范	PASS
3	Antenna Gain 天线增益	Set DUT on Antenna Chamber; make individual calibration to test 设置天线暗室参数进行测试	Directive DUT specification 符合待测物规范	PASS
4	Solderability 可焊性	GB / T2423.28-2005 Temp: 260±5° C;Duration: 5 seconds 温度 260±5° C;持续 5 秒	Tin evenly on full 上锡均匀饱满	PASS
5	Pull Test 拉力	Holding with individual specification; force applied to axis of terminal .单独定义产品端子拉力	1. Directive DUT specification 2. Frequency Tol.≤5% 符合待测物规范;频率偏移≤5%	PASS
6	Dimension 尺寸	Inspection of dimension, color, material, package, surface process.检查尺寸,颜色,材料,包装,表面处理	Directive DUT specification 符合待测物规范	PASS
7	Salt Spray 盐雾	GB / T 2423.17-2008 Temp: 35°C; RH: ≥ 95%; NaCl solution: ≥ 5%;Time: 24H 温度 35°C; 湿度≥95%;盐水浓度≥5%; 测试 24H	1. No Visual Damage 2. Frequency Tol.≤5% 无明显外观不良;频率偏移≤5%	PASS
8	RoHS	With Reference to IEC 62321:2008 with flow chart 参考 IEC 62321 测试流程	Directive RoHS 2015/863/EU 符合 RoHS 2015/863/EU 标准	PASS

Product Number: AN2400-PCB55GX

Product Name: Antenna

3. Antenna - S Parameter Test Data



Product Number:AN2400-PCB55GX

Product Name: Antenna

4. Antenna - Radiation Pattern Test Data

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	4.61	4.99	5.05	5.06	5.06	4.98	4.72	4.69	4.59	4.41	4.39
Efficiency (%)	61.69	62.87	63.40	64.03	65.96	64.58	63.99	63.84	62.90	61.54	60.36

有源

PC模块-2号机

802.11b-11Mbps

Channel	ch1	ch6	ch11
TRP (dEm)	20.63	21.74	21.47
TIS (dEm)	-81.69	-81.64	-82.38

802.11g-54Mbps

Channel	ch1	ch6	ch11
TRP (dEm)	21.16	21.1	19.53
TIS (dEm)	-69.51	-69.03	-69.74

802.11n-MCS7

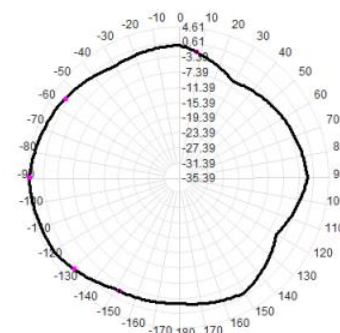
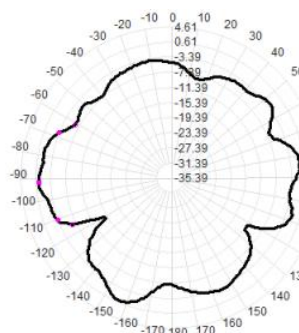
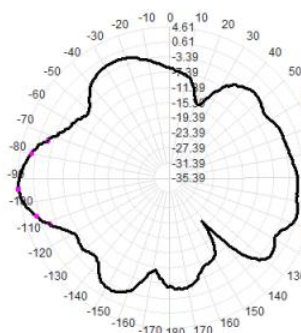
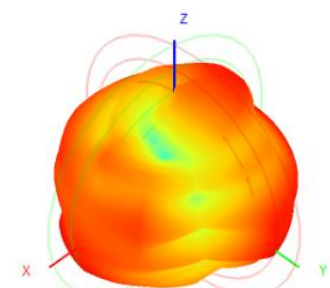
Channel	ch1	ch6	ch11
TRP (dEm)	19.44	20.27	19.47
TIS (dEm)	-66.6	-66.57	-66.04

XZ

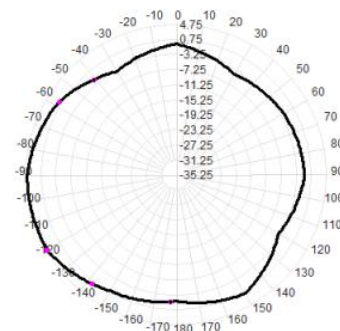
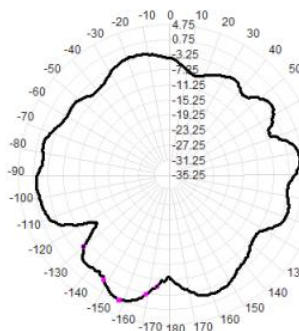
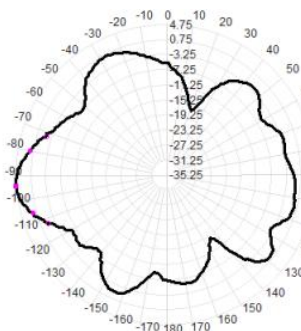
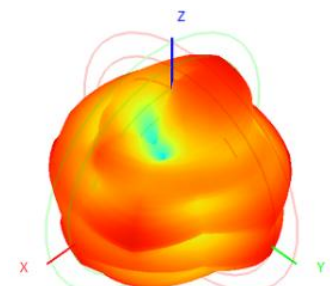
YZ

XY

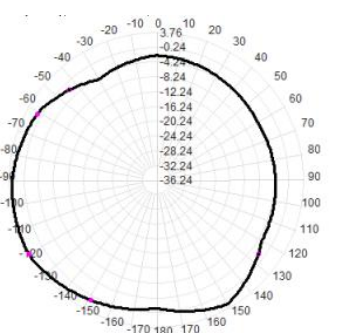
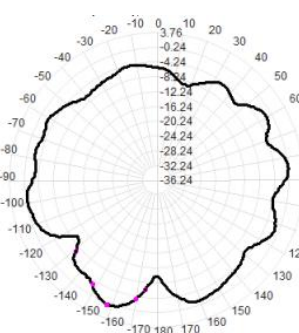
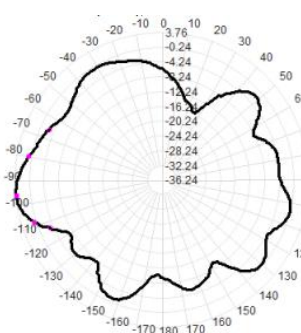
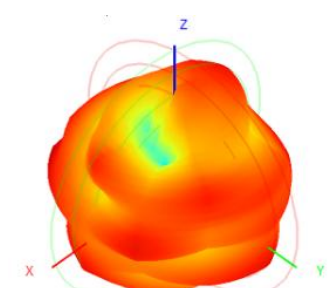
2400MHz



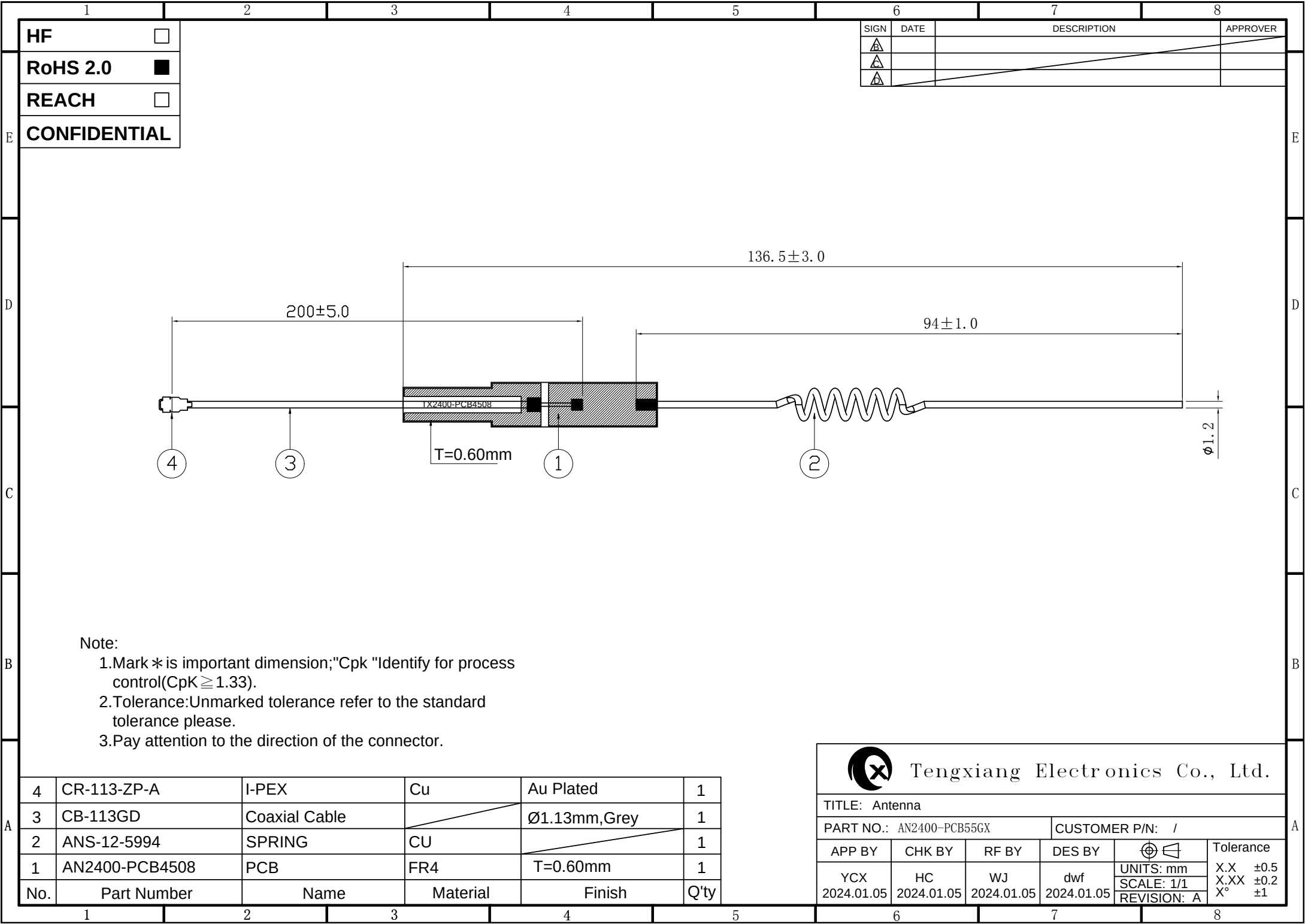
2450MHz



2500MHz



5. Mechanical Drawing See attached files



HF ☐

RoHS 2.0 ☒

REACH ☐

CONFIDENTIAL

SIGN	DATE	DESCRIPTION	APPROVER

Note:

- 1.Mark * is important dimension;"Cpk "Identify for process control($CpK \geq 1.33$).
- 2.Tolerance:Unmarked tolerance refer to the standard tolerance please.
- 3.Pay attention to the direction of the connector.

4	CR-113-ZP-A	I-PEX	Cu	Au Plated	1
3	CB-113GD	Coaxial Cable		Ø1.13mm,Grey	1
2	ANS-12-5994	SPRING	CU		1
1	AN2400-PCB4508	PCB	FR4	T=0.60mm	1
No.	Part Number	Name	Material	Finish	Q'ty

TITLE: Antenna					
PART NO.: AN2400-PCB55GX				CUSTOMER P/N: /	
APP BY	CHK BY	RF BY	DES BY		Tolerance
YCX	HC	WJ	dwf	UNITS: mm	X.X ±0.5
2024.01.05	2024.01.05	2024.01.05	2024.01.05	SCALE: 1/1	X.XX ±0.2
				REVISION: A	X° ±1

产品包装规范

PACKING CRITERION

Date: 2024.01.05

Page: 1 of 1

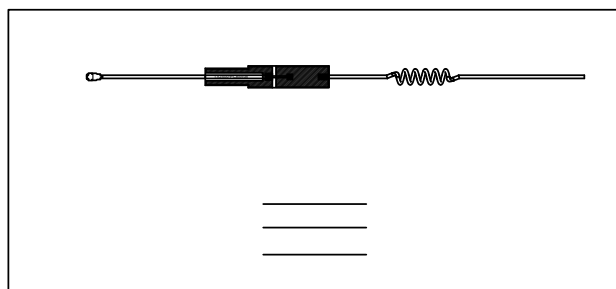
Part Number : AN2400-PCB55GX

Revision : A

Name: Antenna

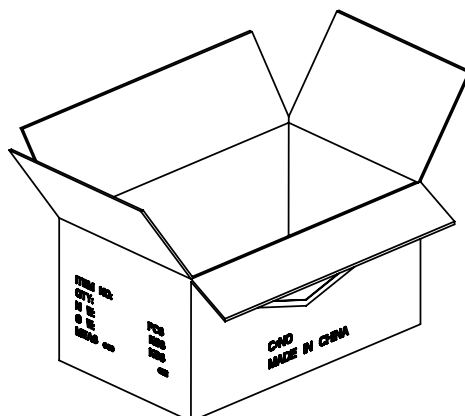
Customer : ALL

1 . Enter PE bag。



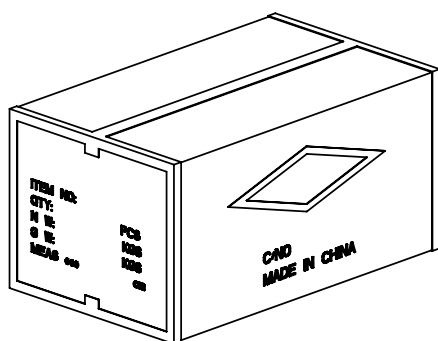
50pcs/ PE bag

2.PACKING 。

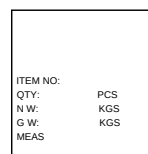


2000pcs/Carton

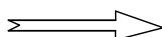
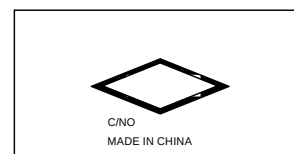
3. SEALING 。



SIDE



FRONT



APPROVED BY : YCX

CHECKED BY : HC

DESIGNED BY : DWF