

Specification For Approval

Date: 2023 / 10 / 27

File No.: 231027005

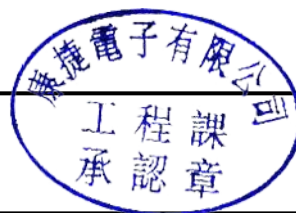
Version: 1.0

Customer : U00431

Customer P/N : /

INVAX P/N : DS0915-0727WNM

Description : Antenna



Cortec Checked By:

RD
2023.10.27
SF

Customer Approved By:



INVAX System Technology Corp.
4F. No. 815.Chung Hsiao East Rd.,Sec.5
Taipei, TAIWAN

TEL:886-2-2788-5218 FAX:886-2-2783-1658
<http://www.invaxsystem.com>



Cortec Technology Inc.
Xian-Xi Industrial, Sha-Tou Administration Zone,
Chang-An Town, Dong-Guan City, Guangdong
Province, China

TEL:86-769-85388261 FAX:86-769-85317869
<http://www.cortec.com.cn>

Index:

- 1. Revision History / Page 3**
- 2. Specification / Page 4**
- 3. Characteristics and Reliability Test / Page 5**
- 4. Antenna - S Parameter Test Data / Page 6**
- 5. Antenna - Radiation Pattern Test Data / Page 7**
- 6. Mechanical and Packing Drawing / Page 8 ~ 9**
- 7. Material Description and RoHS Test Report / Page 10 ~ end**



1. Revision History

Revision	Date	Change Notification	Description
1.0	2023.10.27	初版	

Product Number: DS0915-0727WNM

Product Name: Antenna



2. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	902 ~ 928 MHz
V.S.W.R.	≤ 2.0
Peak Gain	3 dBi
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	Cu
Cable Type	RG316
Connector Type	N Plug
C. Environmental	
Operation Temperature	- 40 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 80 °C

Product Number: DS0915-0727WNM

Product Name: Antenna



3. Characteristics and Reliability Test

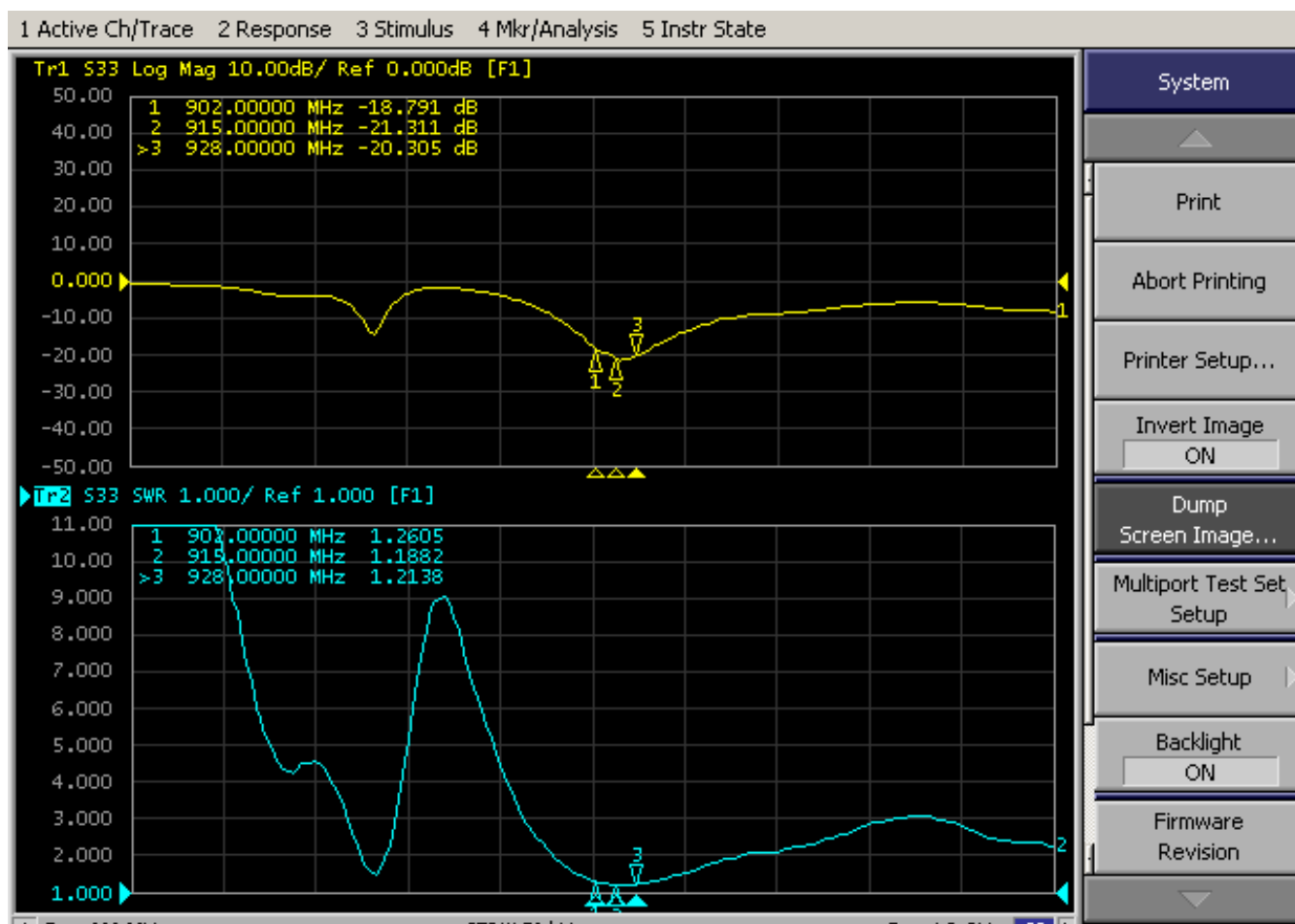
Test Items		Test Condition and Procedure	Requirements
C1	S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
C2	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification
M1	Vibration	GB / T2423 . 48-1997 Amplitude: 0.03 inch (1.5mm); Freq: 20 to 80 to 20 Hz 3 directions; 2 hours for each direction	1. No Visual Damage 2. Frequency Tol.<= 5%
M2	Random Drop	GB / T2423.8-1995 Height: 1.0 Meter; 3 directions; 1 time for each direction	1. No parts separated 2. Frequency Tol.<= 5%
M3	Solderability	GB 2423 . 28- 82 Solder iron: 260±5°C; Duration: 5 seconds	1. Mounted on PCB 2. No Visual Damage
M4	Terminal-Pull Test	Holding with individual specification; force applied to axis of terminal	1. Directive DUT specification 2. Frequency Tol.<= 5%
M5	Terminal-Torque Test	Holding with individual specification; applied clockwise and counterclockwise to the axis of terminal	1. Directive DUT specification 2. Frequency Tol.<= 5%
M6	Dimension	Inspection of dimension, color, material, package, surface process	Directive DUT specification
E1	Salt Spray	GB / T 2423 . 17- 93 Temp: 35°C; RH: >= 95%; NaCl solution: >= 5%; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E2	Humidity	GB / T 2423 . 4 - 93 Temp: 80°C / 12 H; -40°C / 12H RH: >= 90%; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E3	Thermal Shock	GB / T 2423 . 22 - 87 1 Cycle: - 40°C (30 minutes) to + 80°C (30 minutes) Cycles: 24	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E4	Life (High Temp.)	GB /T 2423 . 2 - 89 Temp: 80°C; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
R1	RoHS	With Reference to IEC 62321:2008 with flow chart	Directive RoHS 2015/863/EU

Product Number: DS0915-0727WNM

Product Name: Antenna



4. Antenna - S Parameter Test Data

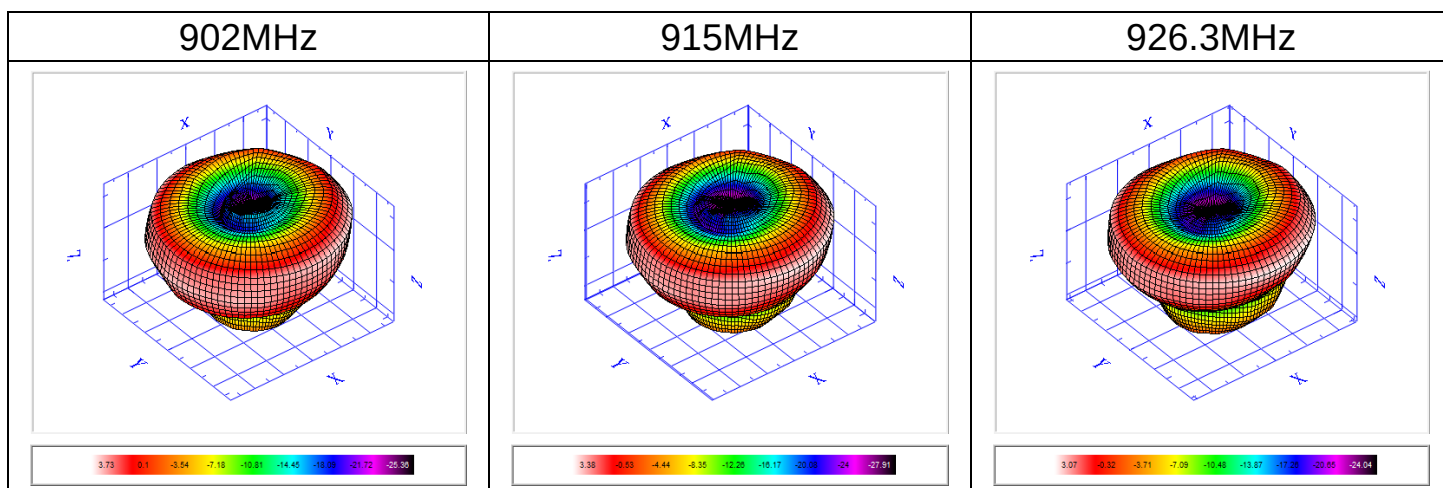
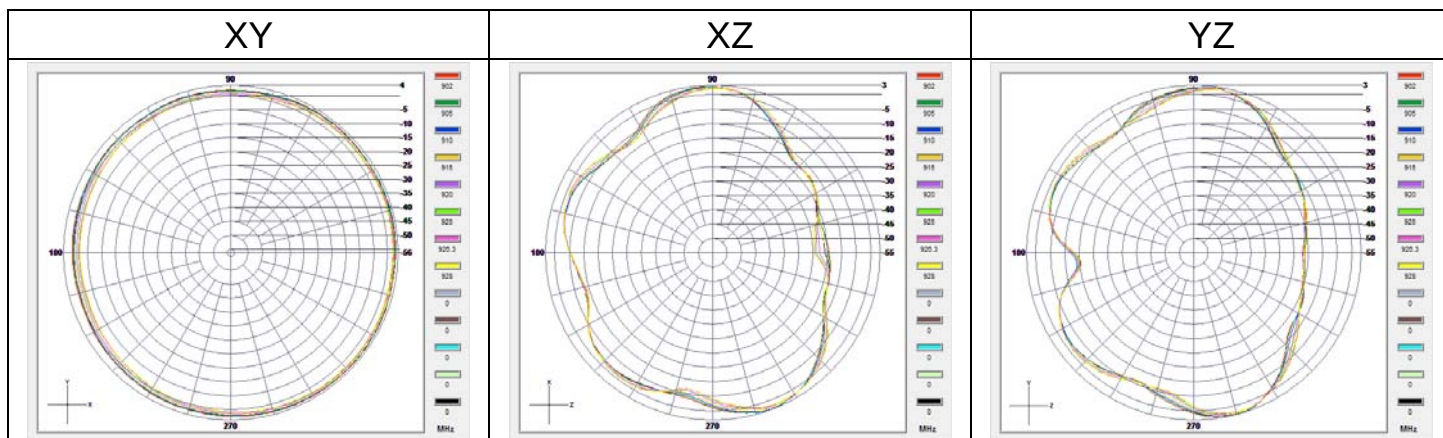


Product Number: DS0915-0727WNM

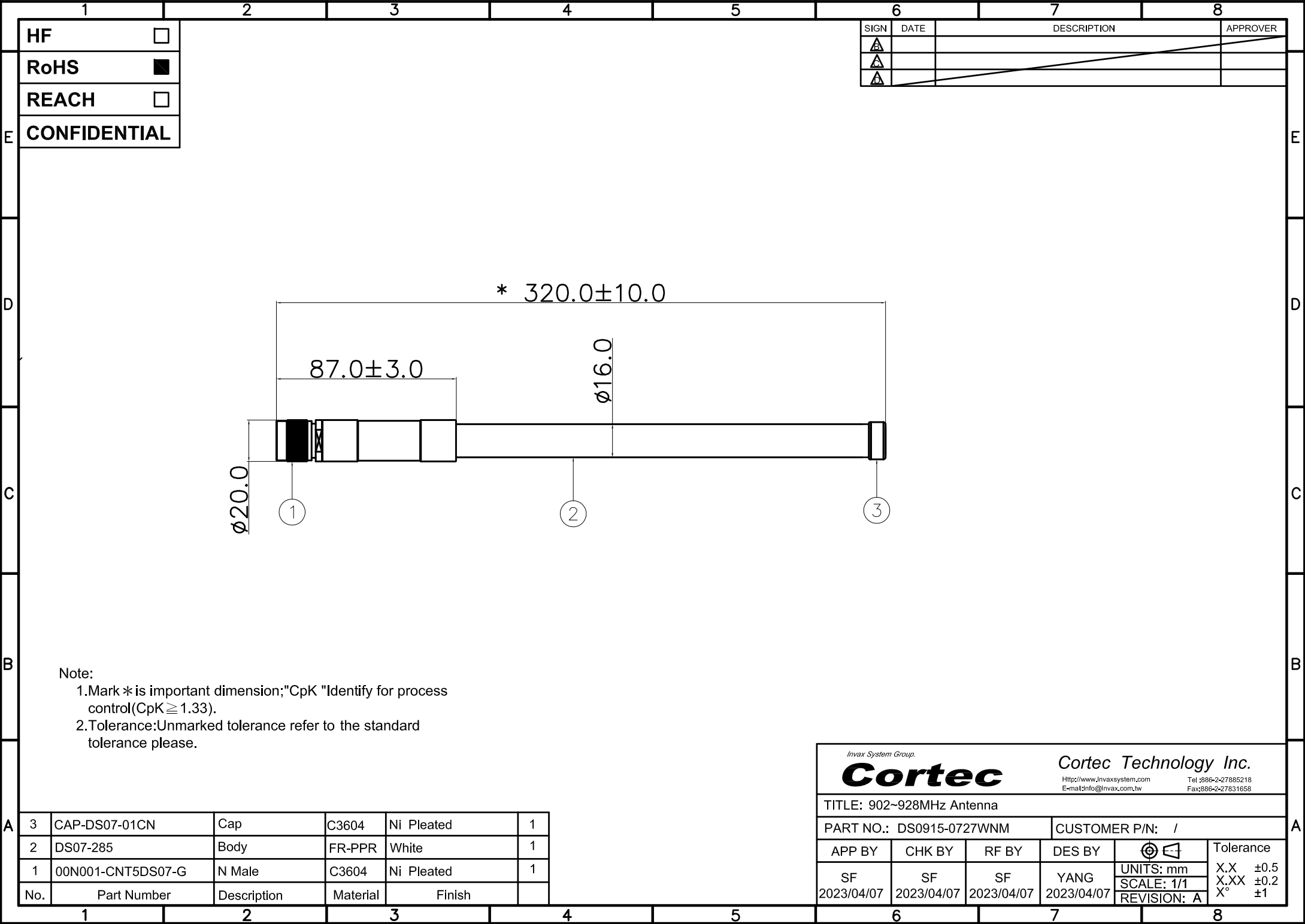
Product Name: Antenna



5. Antenna - Radiation Pattern Test Data



Frequency	902	905	910	915	920	925	926.3	928
E-Total Peak Gain (dBi)	3.73	3.78	3.7	3.38	2.92	3.12	3.07	3
Efficiency (%)	78.56	77.27	77.01	74.55	70.33	71.64	70.96	70.13
Average Gain (dB)	-1.05	-1.12	-1.13	-1.28	-1.53	-1.45	-1.49	-1.54



HF☐

RoHS☒

REACH☐

CONFIDENTIAL

SIGN	DATE	DESCRIPTION	APPROVER

Note:
1.Mark * is important dimension;"CpK "Identify for process control(CpK≥1.33).
2.Tolerance:Unmarked tolerance refer to the standard tolerance please.

3	CAP-DS07-01CN	Cap	C3604	Ni Pleated	1
2	DS07-285	Body	FR-PPR	White	1
1	00N001-CNT5DS07-G	N Male	C3604	Ni Pleated	1
No.	Part Number	Description	Material	Finish	

Invax System Group.

Cortec

Cortec Technology Inc.

Http://www.invaxsystem.com

E-mail:info@invax.com.tw

Tel :886-2-27885218

Fax:886-2-27831658

TITLE: 902~928MHz Antenna

PART NO.: DS0915-0727WNM

CUSTOMER P/N: /

APP BY	CHK BY	RF BY	DES BY		Tolerance
SF	SF	SF	YANG	UNITS: mm	X.X ±0.5
2023/04/07	2023/04/07	2023/04/07	2023/04/07	SCALE: 1/1	X.XX ±0.2
				REVISION: A	X° ±1