

Product Number: PD-AN868-5SR

Product Name: Antenna

Specification For Approval

Date: 2019-04-09

File No.: 190409001

Version: 1.0

Customer : _____

Customer P/N : /

P/N : **PD-AN868-5SR**

Description : Antenna

Checked By:
Customer Approved By:

Product Number: PD-AN868-5SR
Product Name: Antenna

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Product Number: PD-AN868-5SR

Product Name: Antenna

1. Revision History

Revision	Date	Change Notification	Description
1.0	2017.07.29		

Product Number: PD-AN868-5SR

Product Name: Antenna

2. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	868 MHz
S.W.R.	≤ 3.0
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	Cu
Material of Plastic	Body: TPEE Hinge: ABS Holder: ABS
Cable Type	RG-178
Connector Type	SMA Male
Connector Pull Test	$\geq 5\text{Kg}$
C. Environmental	
Operation Temperature	- 40 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 80 °C
Antenna Color Storage life	< 2 year

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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 2011/65/EU
R2	PFOS	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC
R3	PFOA	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC

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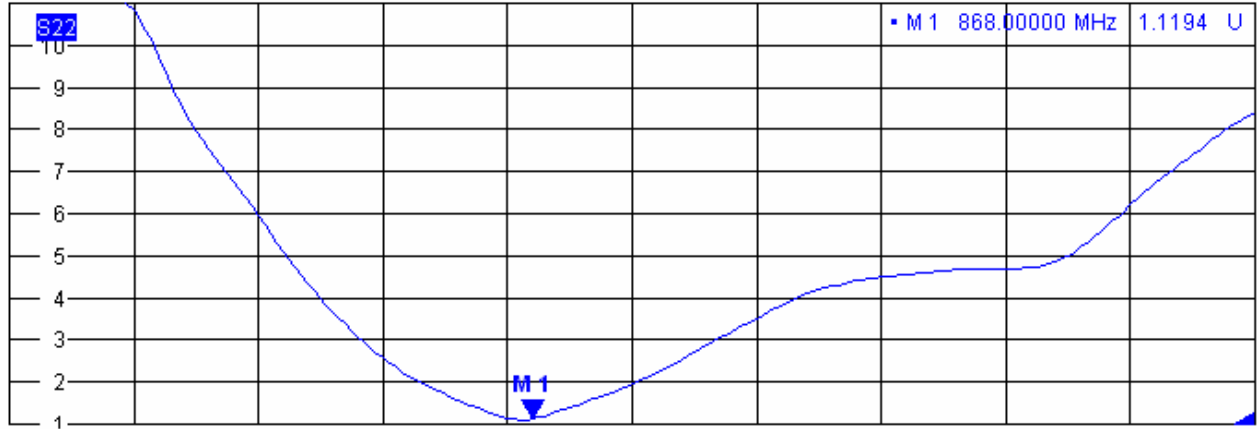
Product Name: Antenna

4. Antenna - S Parameter Test Data



Trc1 S22 SWR 1 U / Ref1 U

1



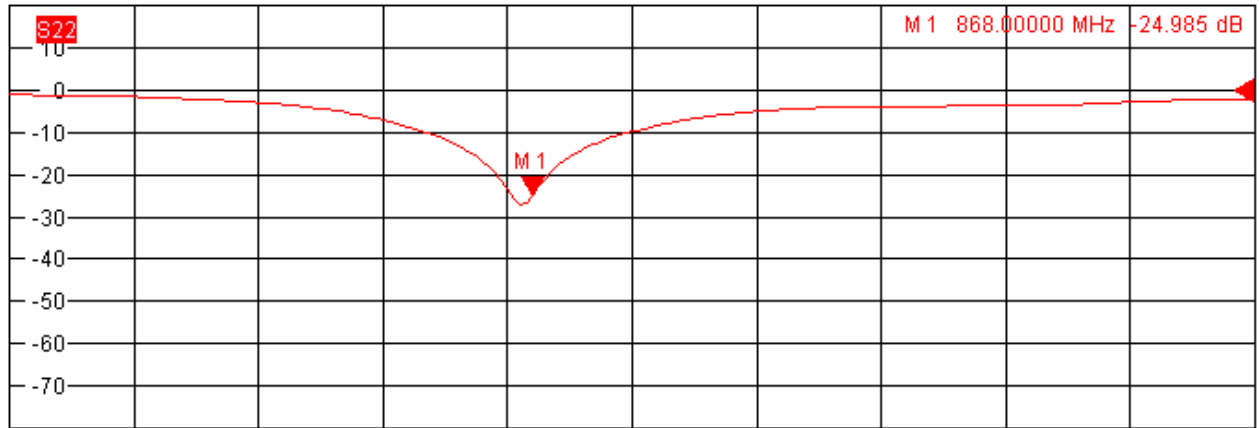
Ch1 Start 700 MHz

Pwr 0 dBm

Stop 1.1 GHz

Trc2 S22 dB Mag 10 dB / Ref0 dB

2



Ch1 Start 700 MHz

Pwr 0 dBm

Stop 1.1 GHz

2/17/2014, 2:58 PM

Product Number: PD-AN868-5SR

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5. Antenna - Radiation Pattern Test Data

Testing Equipment Specification:

Antenna Anechoic Chamber Dimension: 8 x 4 x 4 m

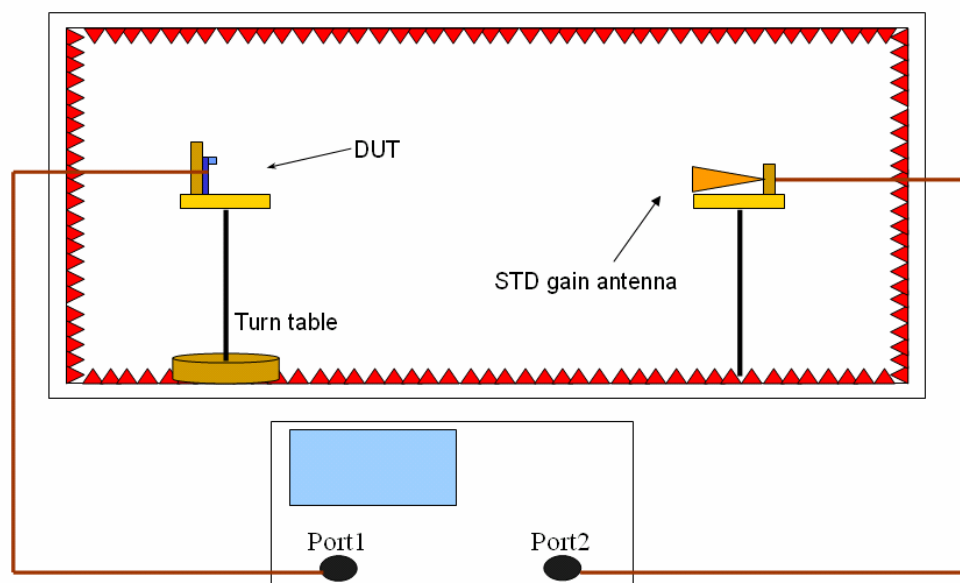
Quiet Zone: 600mm @1 GHz

Isolation: >100dB @ 1 MHz ~ 10 GHz

Testing Equipment: Agilent 5071B

Received Antenna: 0.7 ~ 6.0 GHz for Gain Calibration

Double Ridged Horn Antenna



6. Mechanical Drawing

See attached files

7. Material Description and RoHS Test Report

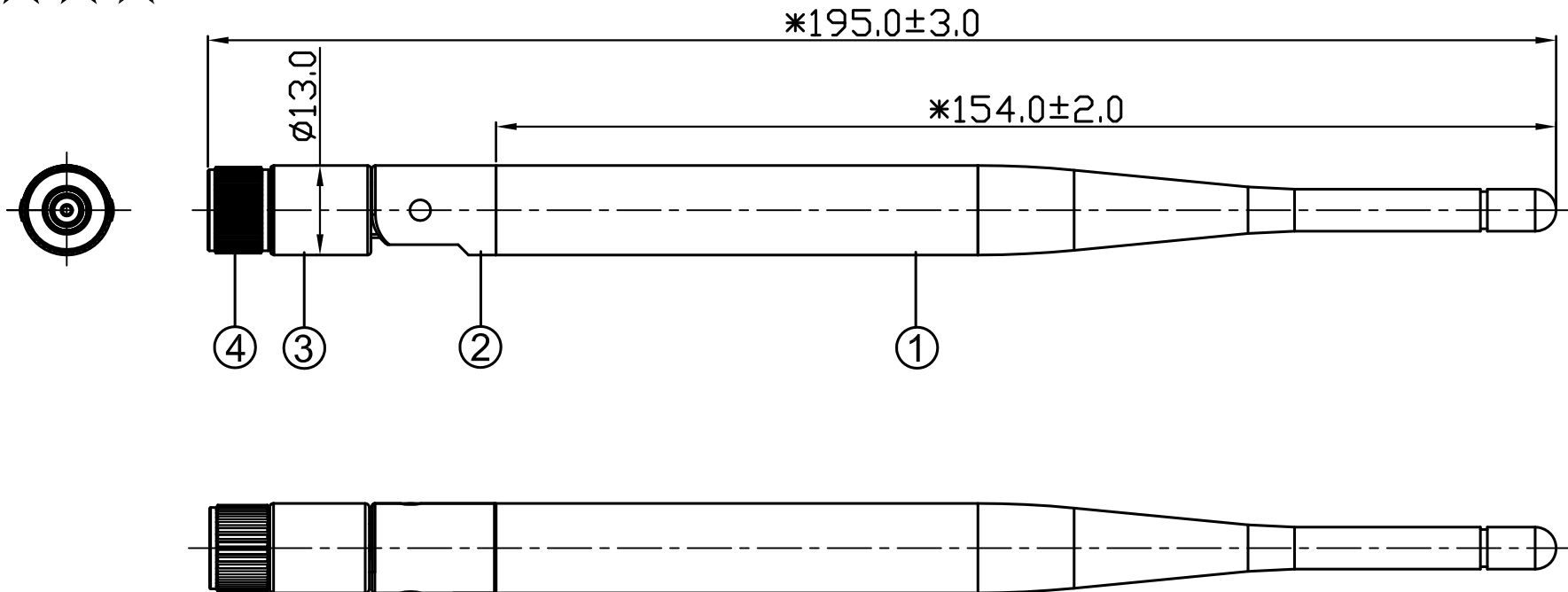
See attached files

RoHS

Compatible



SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			



Note:

1. Take " * " is the important dimension.
2. Tolerance: Unmarked tolerance refer to the standard tolerance please.

4	SMA207-CCT5AN19	SMA Male	Cu	Eletrodeposition	1
3	AN0304-T06B	Body2	PA+ABS	Black	1
2	AN9201-02B	Body3	ABS	Black	1
1	AN9201-04B	Body1	TPE	Black	1
No.	Part Number	Description	Material	Finished	Q'ty

TITLE: 868 MHz Antenna					
PART NO.: PD-AN868-5SR			CUSTOMER P/N: /		
APP BY	CHK BY	RF BY	DES BY		Tolerance
LQ			DJC		UNITS: mm
2017.07.29			2017.07.29	SCALE: 1/1	X.XX ±0.2
				REVISION: A	X° ±1

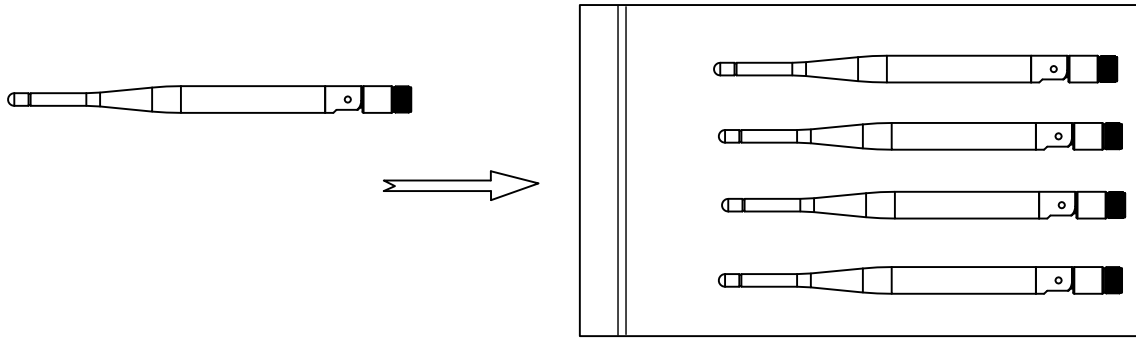
PACKING CRITERION

Date: 2017.07.29

Page: 1 of 1

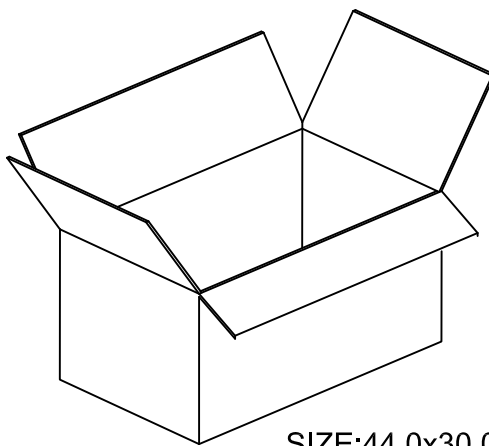
Part Number : PD-AN868-5SR	Revision : A
Name: 868MHz Antenna	Customer : ALL

1.



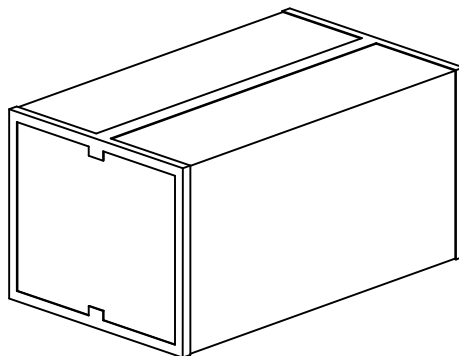
R-PE-BAG-300245006 50PCS/BAG

2.



SIZE:44.0x30.0x28.0cm
1000 PCS/BOX

3.



APPROVED BY : LQ

CHECKED BY : DJC

DESIGNED BY : DJC