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Product Number: DS0868-10C01SM

Product Name: Antenna



1. Revision History

Revision	Date	Change Notification	Description
1.0	2015.08.21	初版	

Product Number: DS0868-10C01SM

Product Name: Antenna



2. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	868 MHz
S.W.R.	≤ 2.0 The data is tested with 1M cable
Peak Gain	3.8 dBi
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	Ni Plated
Material of Plastic	Glass Fiber
Cable Type	RG58
Connector Type	N Jack
Connector Pull Test	≥ 3 Kg
Connector Torque Test	None
C. Environmental	
Operation Temperature	- 40 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 80 °C

Product Number: DS0868-10C01SM

Product Name: Antenna



3. Characteristics and Reliability Test

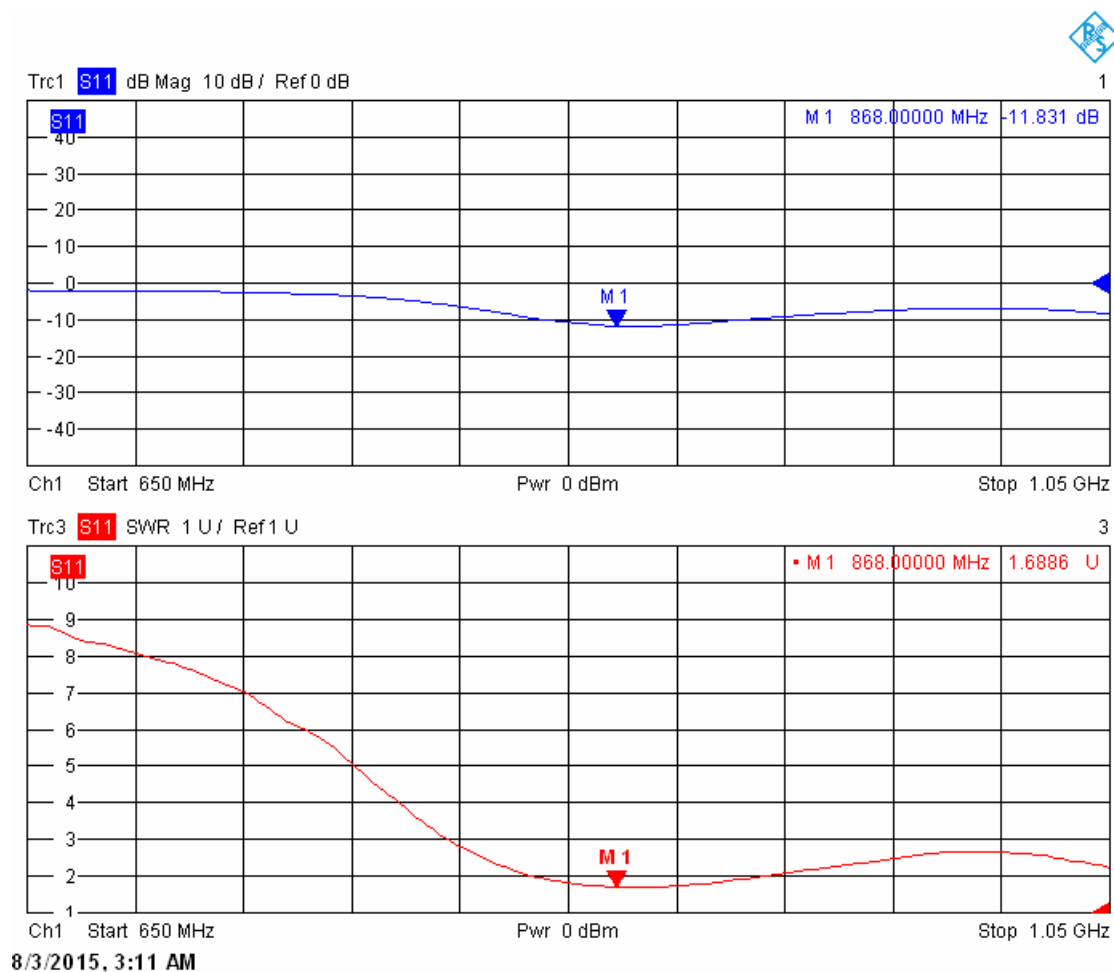
Test Items		Test Condition and Procedure	Requirements
C1	S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
C2	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification
M1	Vibration	GB / T2423 . 48-1997 Amplitude: 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 2002/95/EC
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

Product Number: DS0868-10C01SM

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4. Antenna - S Parameter Test Data

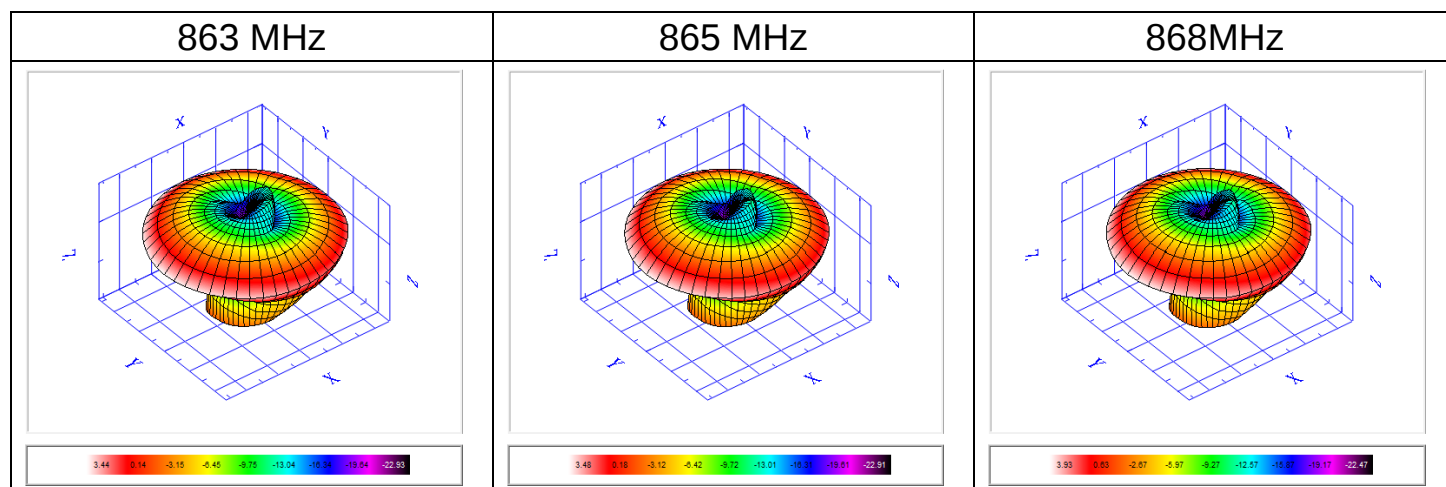


Product Number: DS0868-10C01SM

Product Name: Antenna



5. Antenna - Radiation Pattern Test Data



Frequency	863	864	865	867	868	869	870	871	872	873
TRP (dBm)	-2.19	-2.18	-2.19	-1.98	-1.81	-1.66	-1.6	-1.63	-1.75	-1.87
Peak EIRP (dBm)	3.44	3.48	3.48	3.71	3.93	4.12	4.16	4.07	3.94	3.75
NHPRP +/- 45 (degree)	-2.13	-2.11	-2.12	-1.91	-1.74	-1.59	-1.52	-1.56	-1.68	-1.79
NHPRP +/- 30 (degree)	-2.7	-2.69	-2.7	-2.5	-2.33	-2.19	-2.13	-2.18	-2.31	-2.43
E-Theta Peak Gain (dBi)	-17.5	-17.7	-17.8	-17.7	-17.2	-16.8	-16.7	-16.7	-16.3	-16.3
E-Phi Peak Gain (dBi)	3.43	3.47	3.47	3.71	3.92	4.11	4.15	4.07	3.93	3.74
E-Total Peak Gain (dBi)	3.44	3.48	3.48	3.71	3.93	4.12	4.16	4.07	3.94	3.75
Directivity (dBi)	5.63	5.66	5.66	5.69	5.74	5.77	5.76	5.71	5.69	5.62
Efficiency (%)	60.4	60.5	60.5	63.4	65.9	68.3	69.3	68.6	66.8	65.1

6. Mechanical Drawing

See attached files

7. Material Description and RoHS Test Report

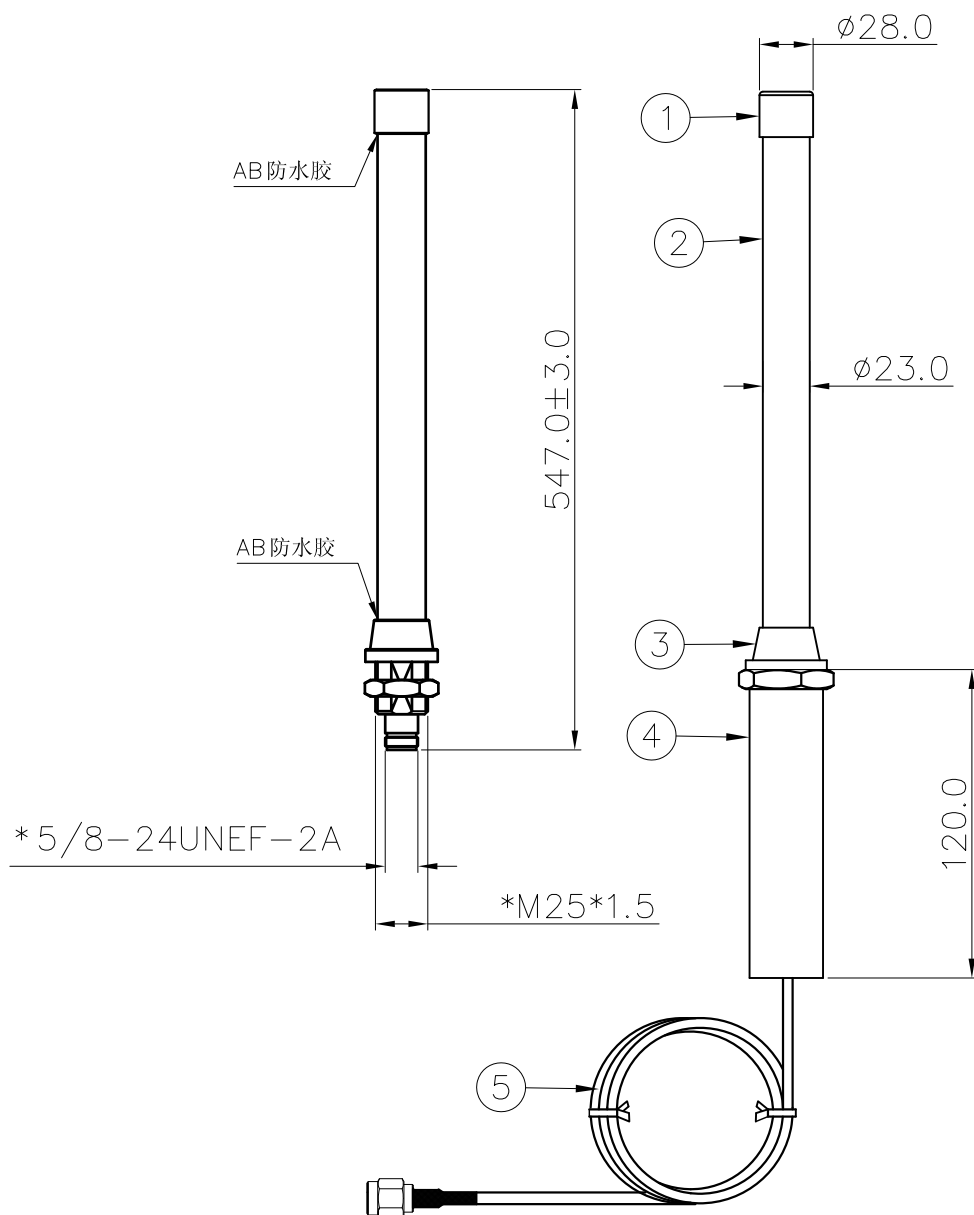
See attached files

RoHS

Compatible



SIGN	DATE	DESCRIPTION	APPROVED
△			
△			
△			



Note:

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

5	00NMN8-504M-SMAMN8	Cable(Balun)		N / RG58 / SMA L=4000mm	1
4	TUBE-120B	TUBE(Balun)	Al Alloy	Anode L=120mm	1
3	00N207-ZN8FNANT	N Jack	Zn Alloy	Ni Plated	1
2	DS10C-500	Glass Fiber Tube	Glass Fiber	ø23.0*500mm	1
1	R-DS10-01A	Cover	Zn Alloy	Ni Plated	1
No.	Part Number	Description	Material	Finish	Q'ty

Invax System Group.

Cortec

Cortec Technology Inc.

Http://www.invaxsystem.com Tel: 886-2-27885218
E-mail: info@invax.com.tw Fax: 886-2-27831658

TITLE: Antenna

PART NO.: DS0868-10C01SM

CUSTOMER P/N: /

APP BY

UNITS: mm

SCALE: 1:1

REVISION: A

Grant
2015/08/21

Tolerance
X.X ±1.0
X.XX ±0.5
X° ±1

CHK BY

RF BY

DES BY

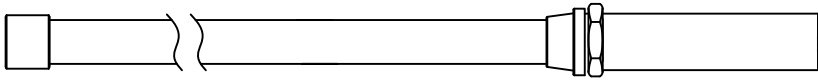
Jack
2015/08/21

SF
2015/08/21

HC
2015/08/21

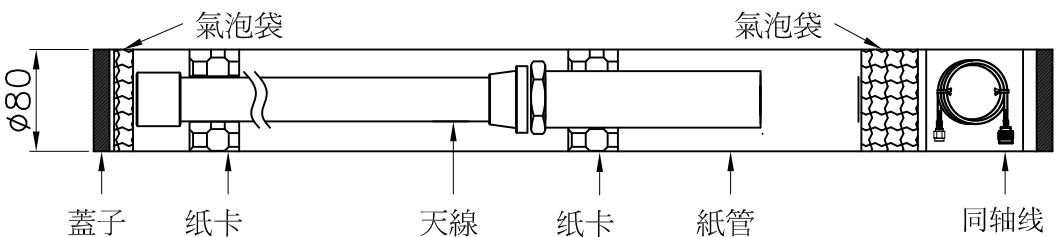
Part Number : DS0868-10C01SM	Revision : A
Name: ANTENNA	Customer : ALL

一．組裝配件



將螺母、鋁管、裝配在天線上

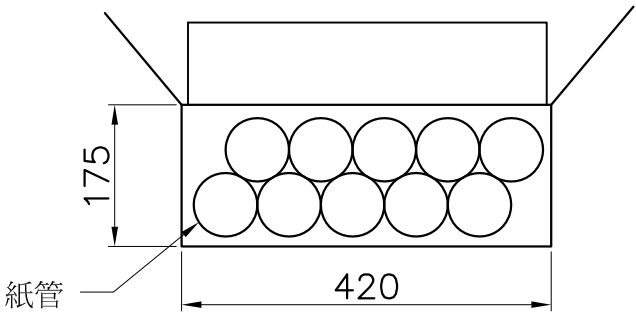
二．裝天線入紙管



氣泡袋 氣泡袋 蓋子 紙卡 天線 紙卡 紙管 同轴线 封口

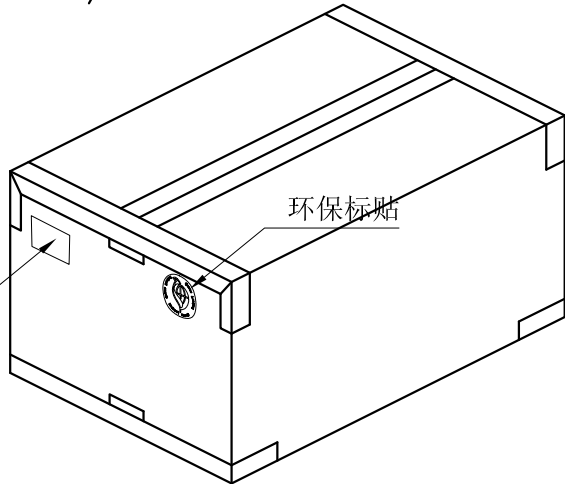
注：需在適當的位置加些氣泡袋等防止天線及配件晃動

三．裝箱



紙管 175 420 10PCS/CARTON

四．封箱



外箱标貼 環保标貼

UNITS: mm