

2.4GHz Antenna_for DAMA1BM3000402

1. Explanation of Part Number

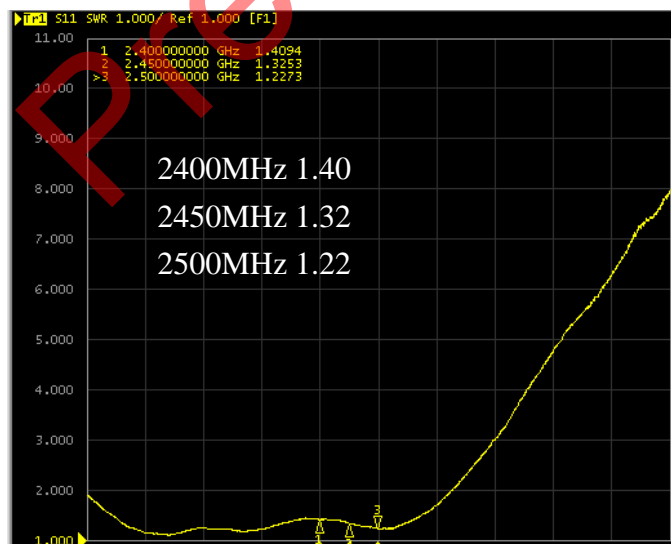
DAM A1 B M3 000 04 02
 (1) (2) (3) (4) (5) (6) (7)

- (1) Product type : DAM-Dipole Antenna Module
 - (2) Appearance Series : A1
 - (3) Frequency : B =2.4G
 - (4) Coaxial Cable Specification : M3=Mini coaxial 1.3mm
 - (5) Coaxial Cable Length : 000=no Length
 - (6) Connector Types :04= SMA Reverse connector
 - (7) Suffix for special requirements : 02=no cable
- ※ RoHS Compliant

2. Electrical properties:

Item	Property
Frequency Range	2.4~2.5GHz
Impedance	50 Ω (Typ.)
VSWR	2.0 max.
Return Loss	-10 dB max.
Peak Gain	3.2 dBi (Peak) 2450MHz
Polarization Type	Vertical
Type of Radiation	O mni
Admitted Power	1 W
Electrical Wave	1/2λdipole

Figure 1. VSWR



4UNLESS OTHER SPECIFIED TOLERANCES ON :

X= X.X= X.XX =
 ANGLES=± HOLEDIA=±



INPAQ TECHNOLOGY CO., LTD.

SCALE :

UNIT : mm

DRAWN BY : 曾玟瑛

CHECKED BY : 楊奇峰

DESIGNED BY : 陳智歲

APPROVED BY : 蔡岳霖

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DOCUMENT
NO.

ENS000009980

SPEC REV.
P1

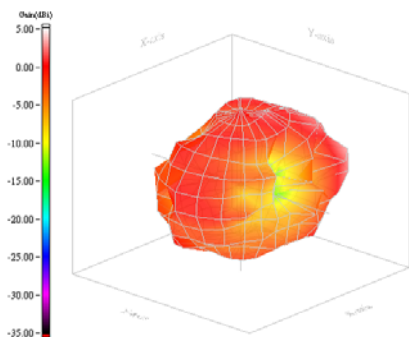
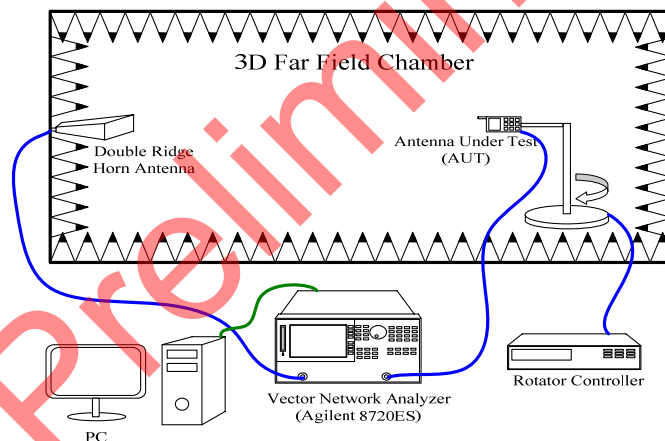
2-1 Radiation Pattern

2-1-1 System Set up

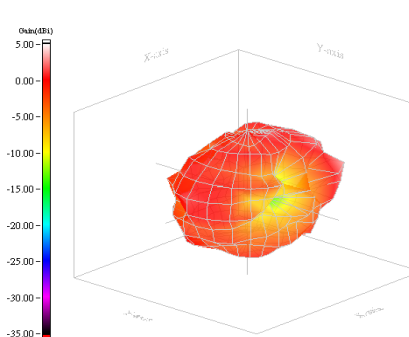
- i. Using a low loss coaxial cable to link a standard handset jig
- ii. Fixed this handset jig on chamber's rotator plane
- iii. Linking coaxial cable into network analyzer port and using a probing horn antenna to collect data.
- iv. Data collecting for each 15 degree.
- v. Using another standard gain horn antenna to calibrated those data

2-1-2 Chamber definition

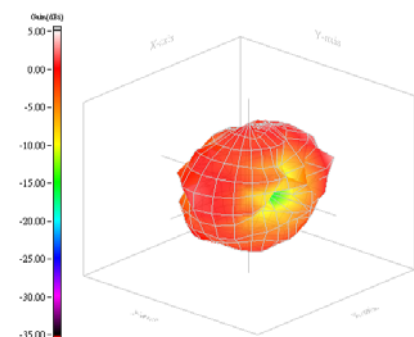
- i. An anechoic chamber (10mx5mx5m) which satisfied far-field condition was applied to avoid multi-path effect
- ii. The quite room region is 40cmx40cmx40cm at the center of rotator (DUT size should small than this space)
- iii. The Probing antenna is Double Ridge Horn Antenna which is placed in the one side of chamber room. And the antenna under testing(AUT) is placed in the other side of the chamber.
- iv. The gain is calibrated by the standard gain horn antenna, and we do the gain calibration in each measurement.
- v. We use the Agilent 8720ES for the pattern measure.



2400MHz



2450MHz



2500MHz

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3. Mechanical properties:

Item	Property
Color	Black
Coaxial-Cable	WEIYANG OD1.37 GRAY
Housing	TPEE
Hinge	Please refer the drawing
Connector	SMA PLUS Reverse
Core	N/A

Operating Temperature : -20~+65°C

Storage Temperature : -40~+80°C

4. Environmental Characteristics:

No	Item	Test Condition	Specification
4-1	High Temperature/Humidity	1.Temperature : +60±2°C. 2.Humidity : 90~95%RH 3.Time : 24hrs	1. Normal functional test must be satisfied after the test. 2. No material deformation is allowed.
4-2	Low Temperature/Humidity	1.Temperature : -20±2°C. 2.Humidity : 0%RH 3.Time : 24hrs	
4-3	High Temperature/Humidity Storage	1.Temperature : +80±2°C. 2.Humidity : 90~95%RH 3.Time : 88hrs	
4-4	Low Temperature/Humidity Storage	1.Temperature : -40±2°C. 2.Humidity : 0%RH 3.Time : 28hr	
4-5	Temperature Cycle Operating Test	1.Temperature : -40~+75°C 2.Duration : ●88 Hours, ●45min/dwelling -40°C, ●10°C per min./transition from -40°C to 75°C, ●45min/dwelling 75°C,	
4-6	Temperature Shock Test	1.Temperature : -40±°C~+75°C. 2.Time : 30 minutes/dwelling, 5 minutes/ transition, 24 cycles	

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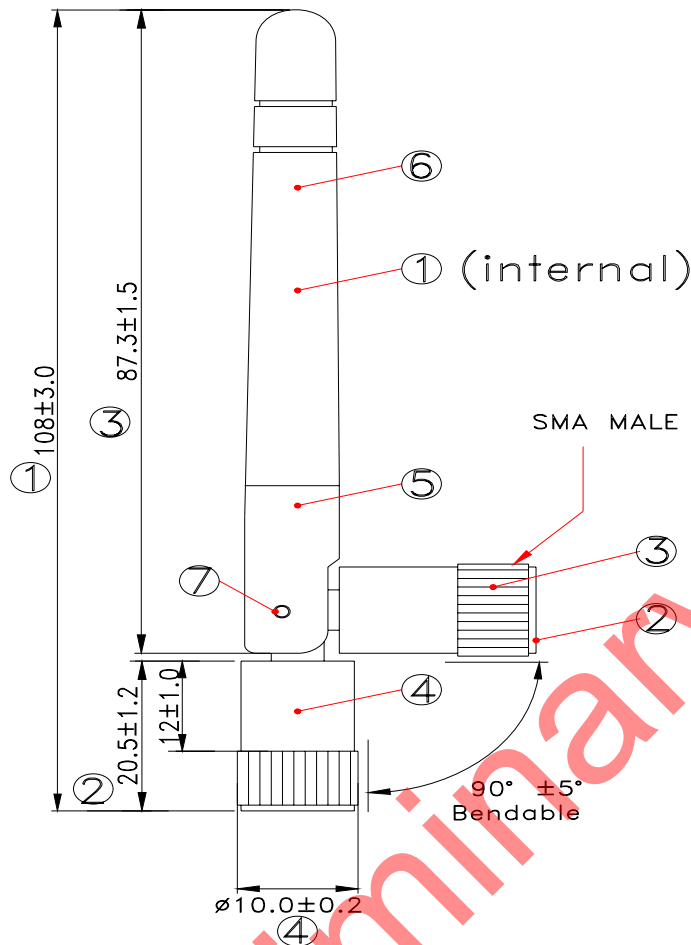
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Physical Dimension:



BILL OF MATERIAL			
ITEM	Q'TY	PART NO.	DESCRIPTION
1	1	CABLE	WEIYANG OD1.37 GRAY
2	1	CONN	BRASS
3	1	CONN COVER	POM:COLOR:BLACK
4	1	SMA BASE	PC+PBT:COLOR:BLACK
5	1	BASE	PC+PBT:COLOR:BLACK
6	1	COVER	TPEE:COLOR:BLACK
7	2	RIVET	BRASS BLACK ZN

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