

SPEC for APPROVAL

CUSTOMER 福彥電子開發股份有限公司

PART NAME AECAP02ANT(GSM 三頻天線)

CUSTOMER'S DWG. NO. _____

CUSTOMER'S PART NO. ANT GSM 01

OUR PART NO. _____

QUANTITY 2 pcs

RESULT \ ACTION	"✓"	CUSTOMER SIGNATURE	NOTE
FULL APPROVED			
CONDITIONAL APPROVED			
REJECTED			

OUR ACTION	APPROVED BY	CHECKED BY	PREPARED BY
SIGNATURE	JASON	RUTH	NICK

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尚源科技有限公司

MODEL: GSM Ant 900/1800/1900 MHz
DEVICE ID: AEC91819ANT

DATE: 09/07/05
OPERATOR:

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START: 0.600000000 GHz GATE START: - ERROR CORR: REFL PORT1
STOP: 2.100000000 GHz GATE STOP: - AVERAGING: 1 PT
STEP: 0.003750000 GHz GATE: - IF BNDWDTH: 1 KHz
WINDOW: -

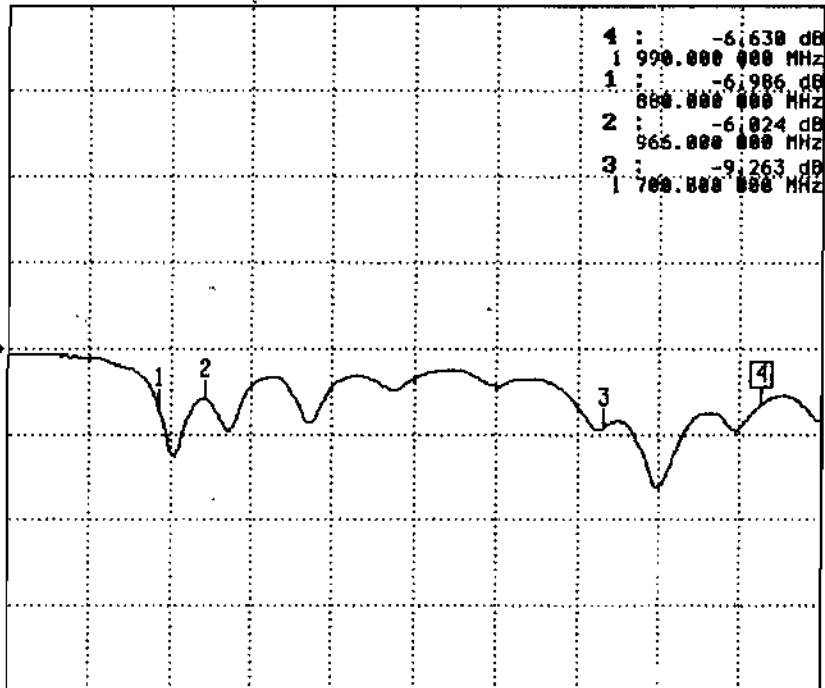
-----CH1-----
PARAMETER: -S11-
NORMALIZATION: OFF
REFERENCE PLANE: 0.0000 mm
SMOOTHING: 0.0 PERCENT
DELAY APERTURE: -

S11 FORWARD REFLECTION

TRANSMISSION/REFLECTION

CH 1 - S11
REFERENCE PLANE
0.0000 mm

LOG MAGNITUDE REF=-0.000 dB 10.000 dB/DIV



600.000 000 MHz

2 100.000 000 MHz

1: 800.000000 MHz
-6.986 dB
2: 966.000000 MHz
-6.024 dB
3: 1.700000000 GHz
-9.263 dB
4: 1.990000000 GHz
-6.630 dB

MARKER TO PEAK

MORE

尚源科技有限公司

MODEL: GSM Ant 900/1800/1900 MHz
 DEVICE ID: AEC91819ANT

DATE: 09/07/05
 OPERATOR:

14:14 Page 1

START: 0.600000000 GHz
 STOP: 2.100000000 GHz
 STEP: 0.003750000 GHz

GATE START: -
 GATE STOP: -
 GATE: -
 WINDOW: -

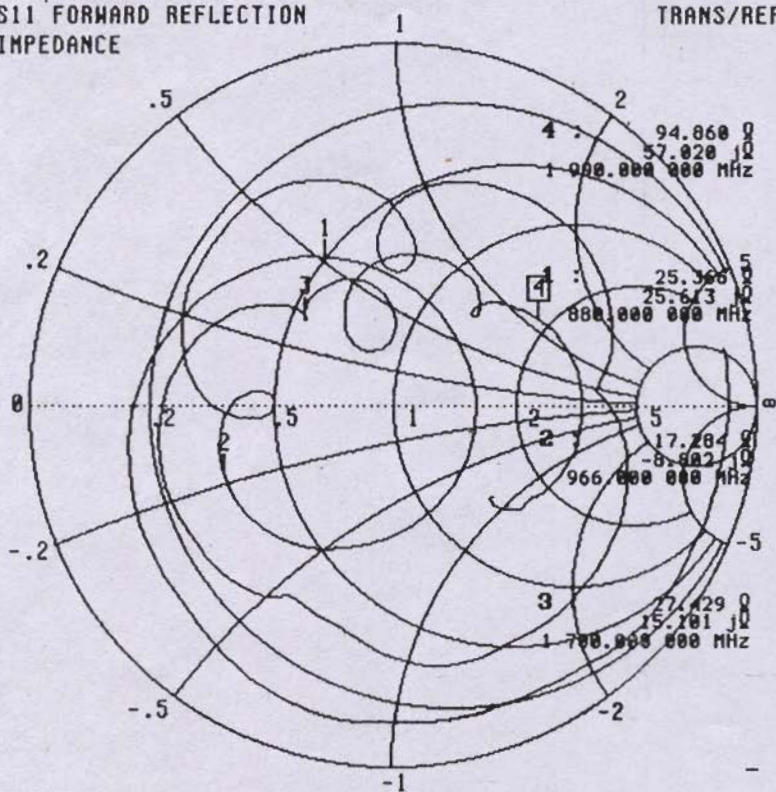
ERROR CORR: REFL PORT1
 AVERAGING: 1 PT
 IF BNDWIDTH: 1 KHz

PARAMETER: -----CH1-----
 NORMALIZATION: -S11-
 REFERENCE PLANE: 0.0000 mm
 SMOOTHING: 0.0 PERCENT
 DELAY APERTURE: -

S11 FORWARD REFLECTION
 IMPEDANCE

TRANS/REFL

CH 1 - S11
 REFERENCE PLANE
 0.0000 mm



- 1: 800.000000 MHz
 25.366 Ω
 25.613 jΩ
- 2: 966.000000 MHz
 17.284 Ω
 -8.882 jΩ
- 3: 1.70000000 GHz
 27.429 Ω
 15.101 jΩ
- 4: 1.99000000 GHz
 94.860 Ω
 57.020 jΩ

MARKER TO PEAK

MORE

600.000 000 MHz - 2 100.000 000 MHz

尚源科技有限公司

MODEL: GSM Ant 900/1800/1900 MHz
 DEVICE ID: AEC91819ANT

DATE: 09/07/05 14:17
 OPERATOR:

Page 1

START: 0.600000000 GHz GATE START: - ERROR CORR: REFL PORT1
 STOP: 2.100000000 GHz GATE STOP: - AVERAGING: 1 PT
 STEP: 0.003750000 GHz GATE: - IF BNDWDTH: 1 KHz
 WINDOW: -

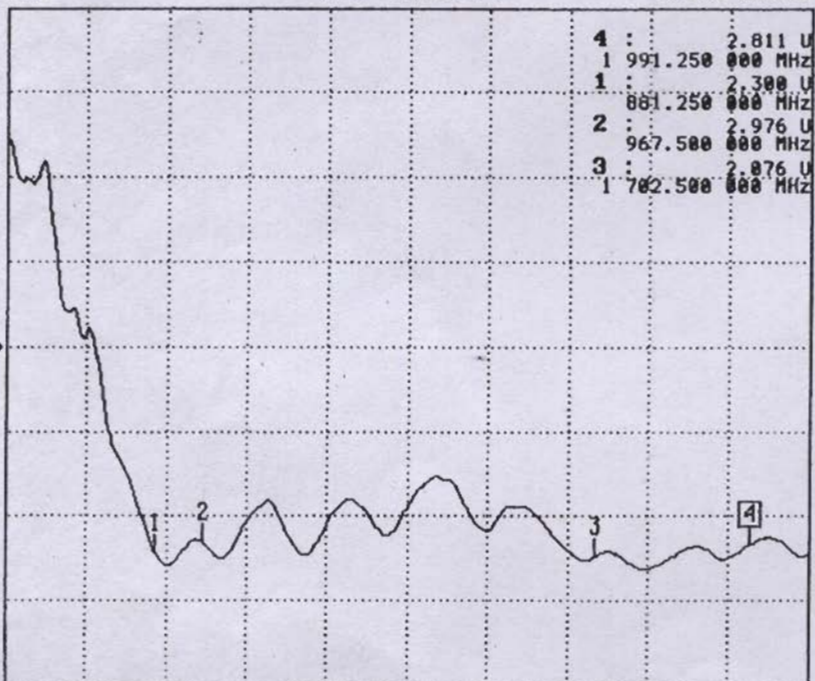
PARAMETER: -----CH1-----
 NORMALIZATION: -S11-
 REFERENCE PLANE: 0.0000 mm
 SMOOTHING: 0.0 PERCENT
 DELAY APERTURE: -

S11 FORWARD REFLECTION

TRANSMISSION/REFLECTION

CH 1 - S11
 REFERENCE PLANE
 0.0000 mm

SWR REF=14.500 U 5.000 U/DIV



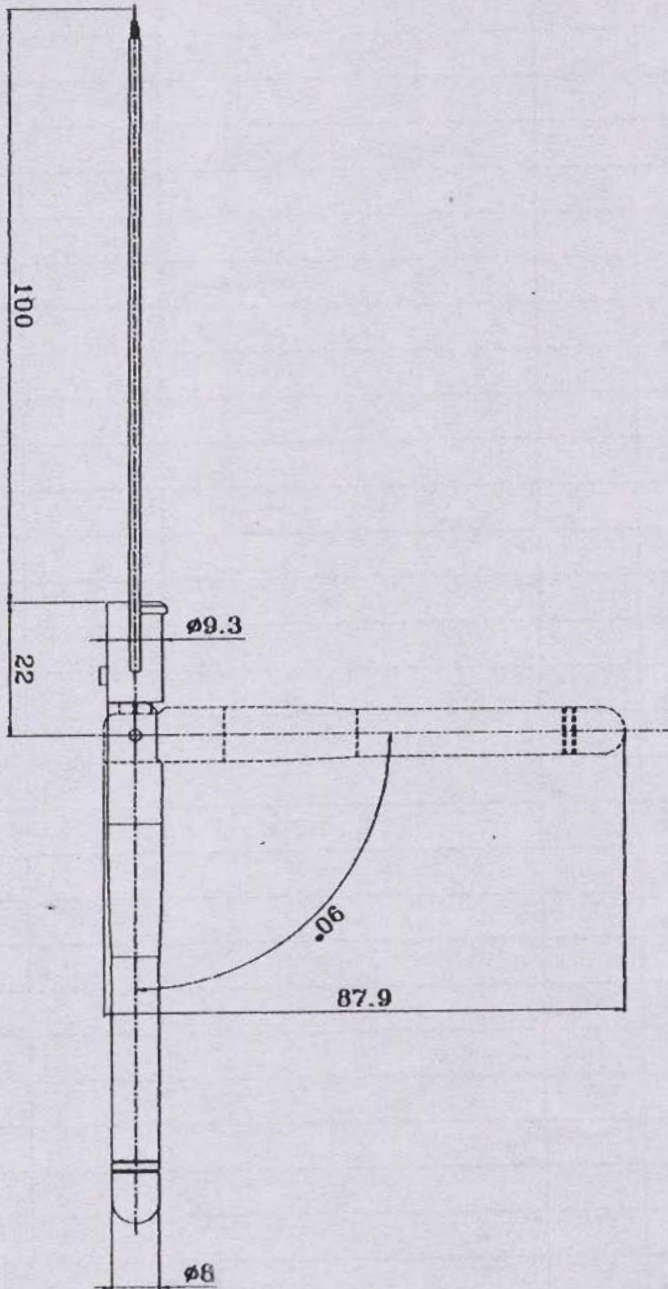
1: 881.250000 MHz
 2.300 U
 2: 967.500000 MHz
 2.976 U
 3: 1.70250000 GHz
 2.076 U
 4: 1.99125000 GHz
 2.811 U

MARKER TO PEAK

MORE

600.000 000 MHz

2 100.000 000 MHz



材質 Material	—	原材處理 Treatment	—	作業 Fabrication	—	外觀圖
比例 Scale	1 : 1	單位 Unit	mm	公差等級 Tolerance	—	
日期 Date	—	圖 Drawing	—	內 Inside	—	
圖 Drawing	—	圖 Drawing	—	客 Customer	—	
圖 Drawing	—	圖 Drawing	—	修訂者 Revised	—	
圖 Drawing	—	圖 Drawing	—	審核 Appr	—	
圖 Drawing	—	圖 Drawing	—	設計 Design	—	
圖 Drawing	—	圖 Drawing	—	製圖 Drawn	—	

AP02

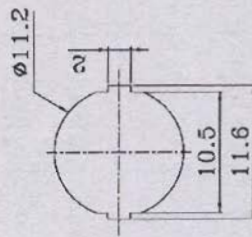
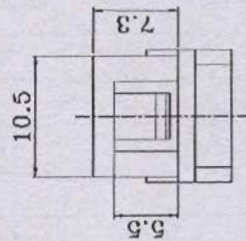
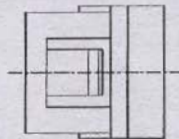
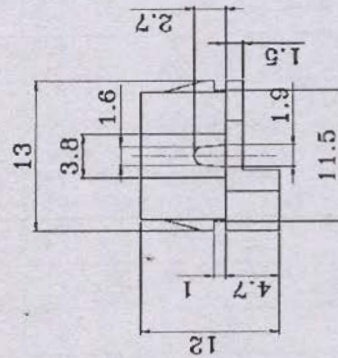
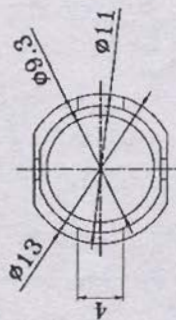
圖號
Drawing No.

AP02-A1

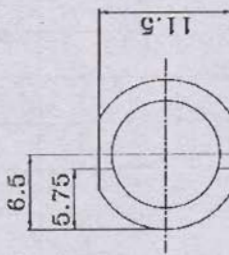
名稱
Description

外觀圖

公差等級	1	2	3	4	5
1-10	± 0.02	± 0.05	± 0.1	± 0.3	± 0.6
11-50	± 0.05	± 0.1	± 0.2	± 0.6	± 1.2
51-250	± 0.08	± 0.2	± 0.5	± 1.2	± 2.0
251-500	± 0.1	± 0.3	± 1.0	± 2.0	± 4.0



- Our recommend size for the antenna hole : see above
- Panel thickness : 1 mm

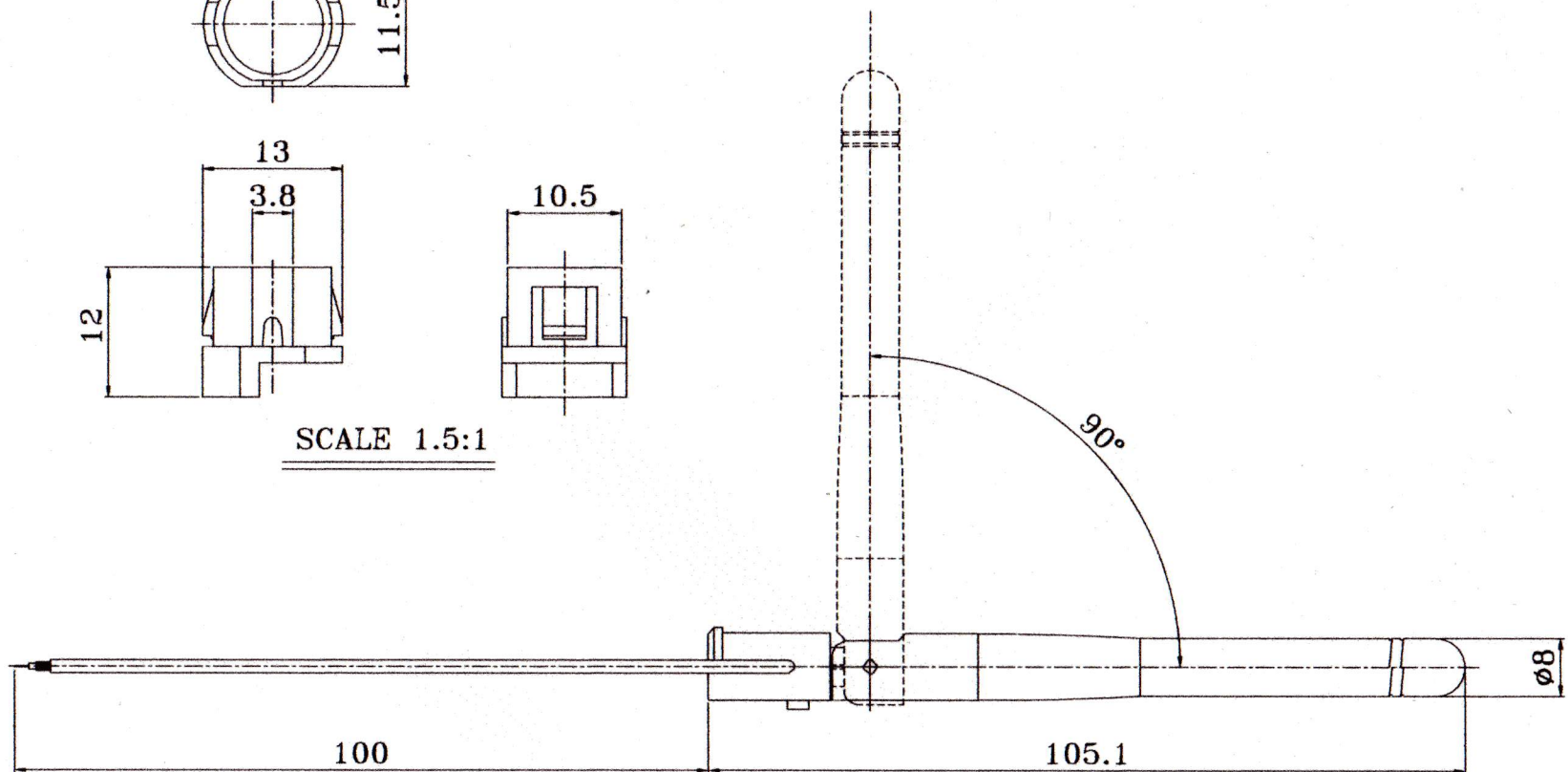
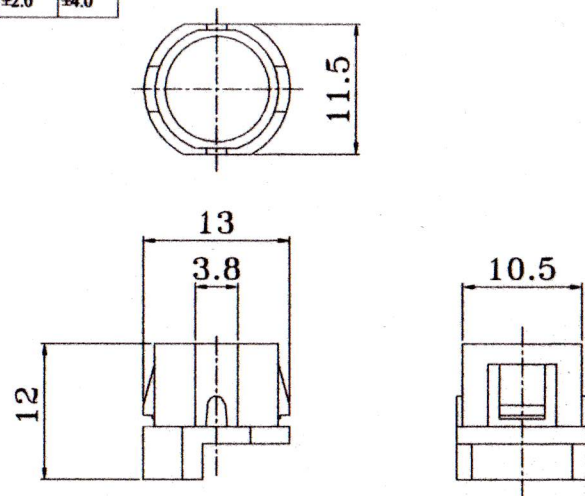


材質 Material	處理 Treatment	作業 Process	射出成型 射出成型	機種 Model No.	圖號 Drawing No.	名稱 Description	套環
比例 Scale	2 : 1	mm	公差等級 Tolerance	AP02	設計 Design	製圖 Drawn	
日期 Date	變更 Amended	內容 Detail	修改者 Revised	審核 Apprv			
1							
2							
3							

■ ELECTRICAL SPECIFICATION

- | | | | |
|--------------------|--|------------------------------|-----------------------|
| 1. ANTENNA TYPE | : Dipole Antenna
(RG-178 100mm+Soliding) | 6. ADMITTED POWER RADIATION: | 3W |
| 2. FREQUENCY RANGE | : 900MHz/1800MHz/1900MHz | 7. TYPE OF RADIATION | : Omni |
| 3. IMPENDANCE | : 50 Ohms | 8. POLARIZATION | : Vertical |
| 4. GAIN | : 900MHz < 2.0 dBi
: 1800MHz < 0 dBi
: 1900MHz < 0 dBi | 9. ELECTRICAL LENGTH | : $1/4\lambda$ Dipole |
| 5. VSWR | : ≤ 2.0 | | |

公差等級	1	2	3	4	5
1~10	±0.02	±0.05	±0.1	±0.3	±0.6
11~50	±0.05	±0.1	±0.2	±0.6	±1.2
51~250	±0.08	±0.2	±0.5	±1.2	±2.0
251~500	±0.1	±0.5	±1.0	±2.0	±4.0



材 質 Material	_____	原材處理 Raw material	_____	作 業 Process	組立加工	機 種 Model No.	AP02-bcd	圖 號 Drawing No.	AP02-bcd-A1	名 稱 Description	Outline Figure
比 例 Scale	1 : 1	再處理 Treatment	_____	單 位 Unit	mm	審 核 Apprv		設 計 Design		製 圖 Drawn	
日 期 Date	變 更 履 歷 內 容 Amend Details				公差等級 Tolerance	2					
△					修改者 Reviser						
△											