

GSM-9018-03-MB

900MHz/1800MHz GSM 圓形基座天線-3dBi



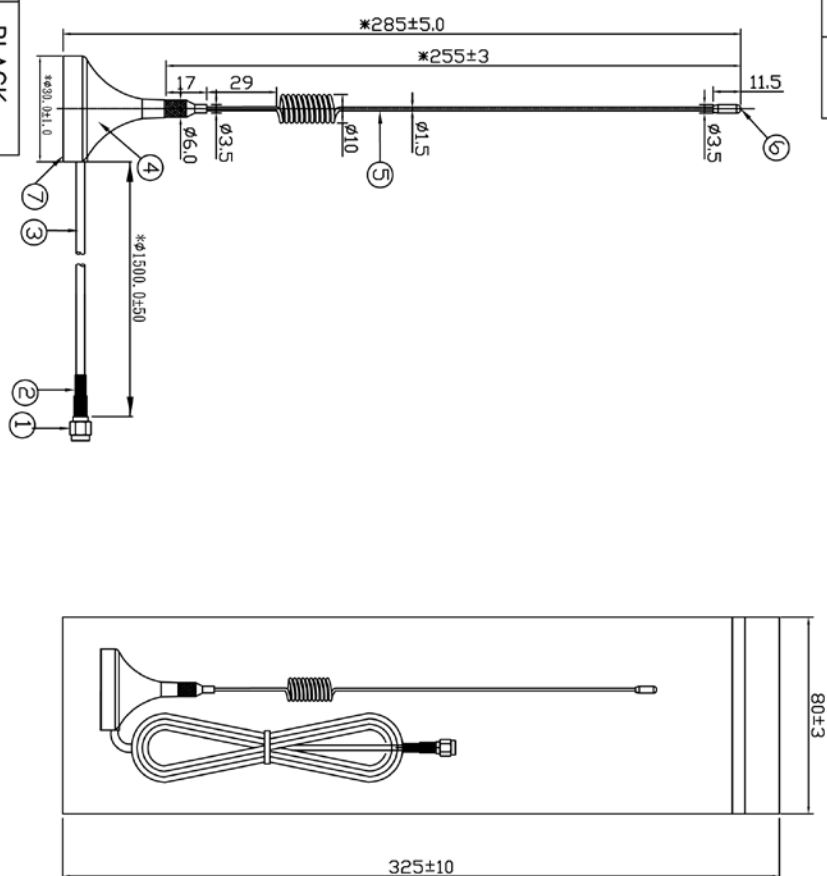
Specification:

| Technical Information |                            |
|-----------------------|----------------------------|
| Item No.              | GSM-9018-03-MB             |
| Frequency             | 824-960MHz<br>1710-2170MHz |
| Gain                  | 3 dBi                      |
| Polarization          | Vertical                   |
| VSWR                  | $\leq 4.0:1$               |
| Impedance             | 50 $\Omega$                |
| Dimensions            |                            |
| Size                  | H 285 mm                   |
| Cable length          | RG174 ,L=1.5M              |
| Weight                | 41 g                       |
| Connector             | RP SMA Type Male           |

| REV | DESCRIPTION | DRAWN | DATE |
|-----|-------------|-------|------|
|     |             |       |      |
|     |             |       |      |


  

|    |                    |     |          |        |
|----|--------------------|-----|----------|--------|
| NO | Description        | Qty | Material | Finish |
| 1  | RP SMA MALE        | 1   | BRASS    | GOLD   |
| 2  | Heat Shrink Tubing | 1   | EVA      | BLACK  |
| 3  | CABLE              | 1   | RG174    | BLACK  |
| 4  | BODY1              | 1   | ABS      | BLACK  |
| 5  | BODY2              | 1   | Fe       | BLACK  |
| 6  | BODY3              | 1   | PVC      | BLACK  |

|   |       |   |          |
|---|-------|---|----------|
| R&D   |       | * MAJOR DIMENSION UNLESS OTHERWISE NOTED TOLERANCES<br>0.X=±0.1<br>0.XX=±0.05 |          |
| SCALE   | 1/1   | UNIT  | MM       |
| APPROVED  | CASH  | CHECKED   | LYDIA    |
| DRAWN   | KEVIN | DRAWN DATE  | 12/05/11 |
| TITLE   |       | DRAWING NO.   |          |
| 900MHz/1800MHz 3dB with magnetic Base GSM Antenna |       | GSM-9018-03-MB  |          |
| REV   | A     |   |          |



華城電子有限公司  
RF CASTLE ELECTRONICS CO., LTD

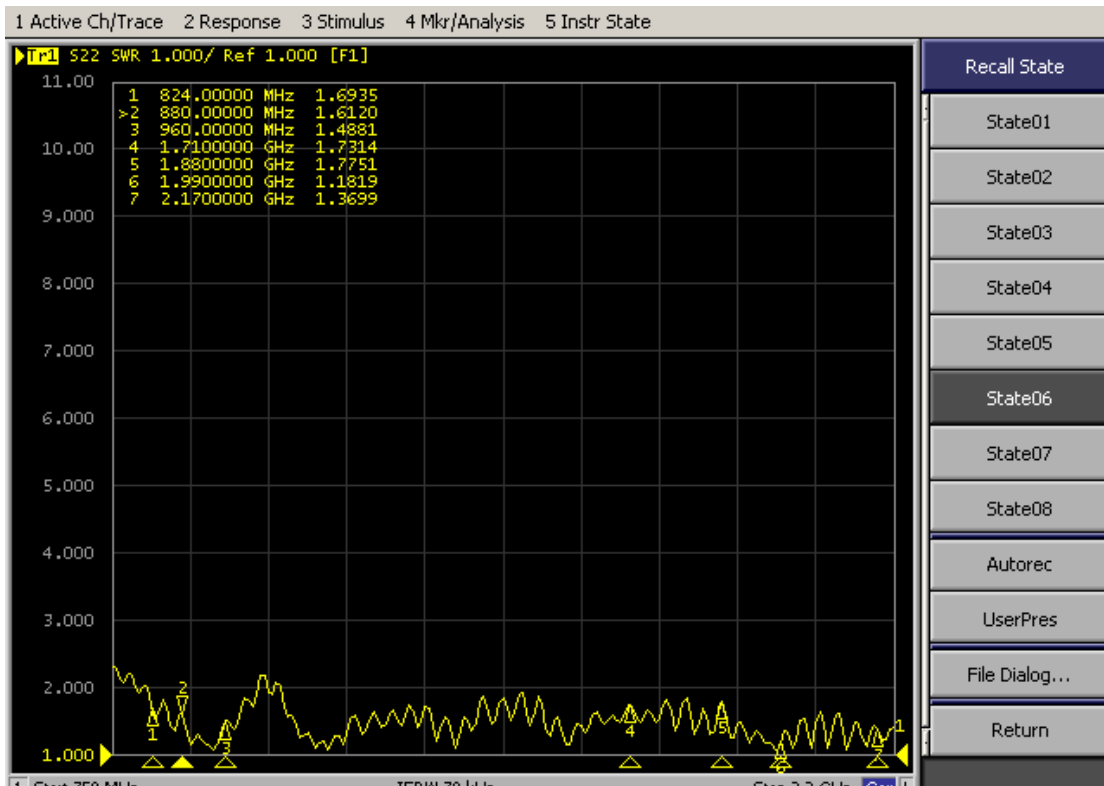
## 1. Reliability Testing

| Test Item                                       | Procedure  | Requirement  |
|---|--|--|
| <b>1. Visual inspection and Dimension Check</b> | Applicable methods using x5 magnification        | follow specification   |
| <b>2. Rapid Changing of Temperature</b>         | -40°C (30minutes) to 90°C (30minutes); 24 cycles | After 2 hours recovery: 1. no visible damage 2. Freq. Tol.: < ±5%  |
| <b>3. Damp Heat</b>                             | 24 hours at 60°C; 90 ~ 95% RH                    | After 2 hours recovery: 1. no visible damage 2. Freq. Tol. : < ±5% |
| <b>4. Endurance</b>                             | 24 hours at 90°C                                 | After 2 hours recovery: 1. no visible damage 2. Freq Tol.: < ±5%   |

## 2.Specification

| <b>A. Electrical Characteristics</b> |  |
|--------------------------------------|--|
| <b>S.W.R.</b>                        | <b>824-960MHz: &lt;= 4.0<br/>1710-2170MHz: &lt;= 4.0</b> |
| <b>Antenna Gain</b>                  | <b>3.0 dBi</b>   |
| <b>Impedance</b>                     | <b>50 Ohm</b>  |
| <b>B. Material</b>                   |  |
| <b>Material of Radiator</b>          | <b>Cu (Plated)</b>                                       |
| <b>Connector Type</b>                | <b>SMA</b>   |
| <b>C. Environmental</b>              |  |
| <b>Operation Temperature</b>         | <b>- 30 °C ~ + 85 °C</b>                                 |
| <b>Storage Temperature</b>           | <b>-30 °C ~+ 85 °C</b>                                   |

### 3.S Parameter Test data



#### 4. Antenna Radiation Pattern

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

