

# GSM Antenna

**MODEL: TH-60**

GSM850/GSM900/DCS1800/PCS1900



## 1. GENERAL DESCRIPTION

Model No	AIR WAVE P/N
TH60	TH60-GSM-MMCX90

Below is a table summarizing the antenna design specification.

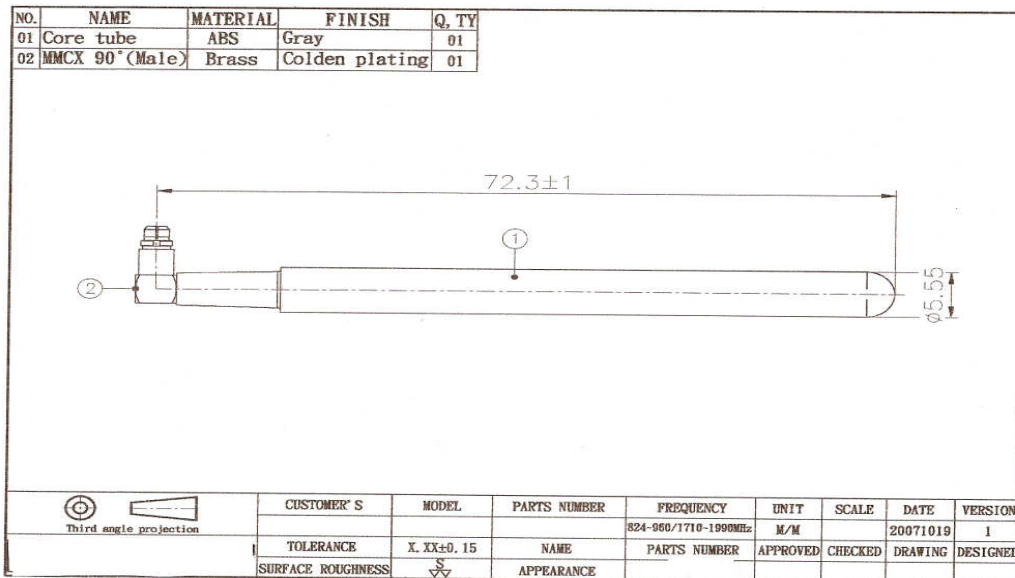
### 1.1 Electrical Properties

Parameter	Description
Frequency Band	850/900/1800/1900Mhz
Nominal Impedance	50 ohm
Polarization	Vertical
Electrical Wave	1/4 $\lambda$ Dipole
V.S.W.R	6.7 : 1
Antenna Average Gain	0~3dBi
Note: Gain includes the cable loss	

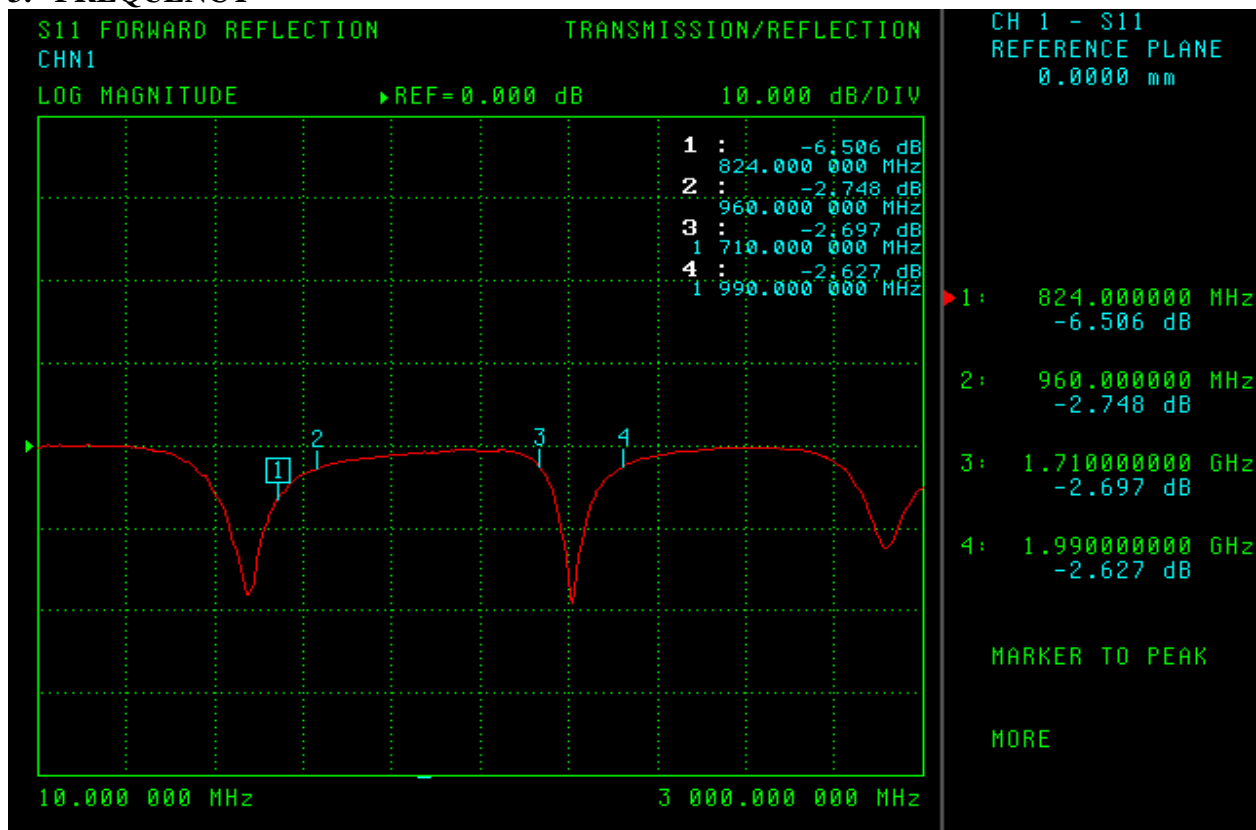
### 1.2 Mechanical Properties

Parameter	Description
Antenna Type	External Antenna
Antenna Cover	ABS
Touch Type	Screw Type
Connector Type	MMCX 90°(Male)
Antenna Dimensions	72.3 mm $\pm$ 1
Antenna Color	Black
Operating Temperature Range	-20°C~+55°C
Storage Temperature Range	-30°C~+55°C

## 2. Appearance



## 3. FREQUENCY



S11 FORWARD REFLECTION  
CHN1

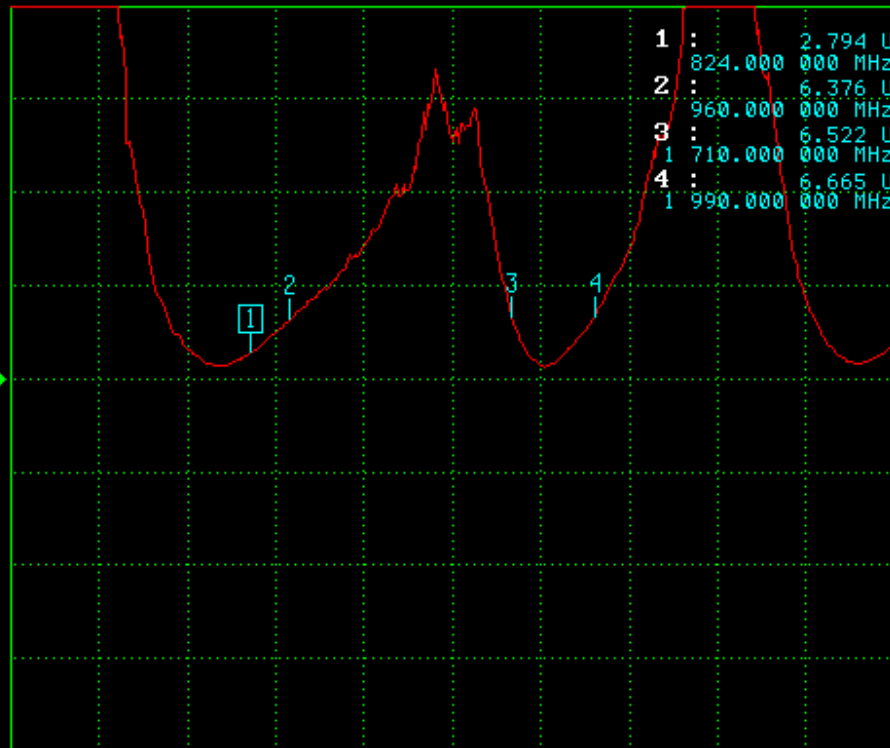
TRANSMISSION/REFLECTION

CH 1 - S11  
REFERENCE PLANE  
0.0000 mm

SWR

REF=0.000 pU

10.000 U/DIV



- 1: 824.000000 MHz  
2.794 U
- 2: 960.000000 MHz  
6.376 U
- 3: 1.710000000 GHz  
6.522 U
- 4: 1.990000000 GHz  
6.665 U

MARKER TO PEAK

MORE

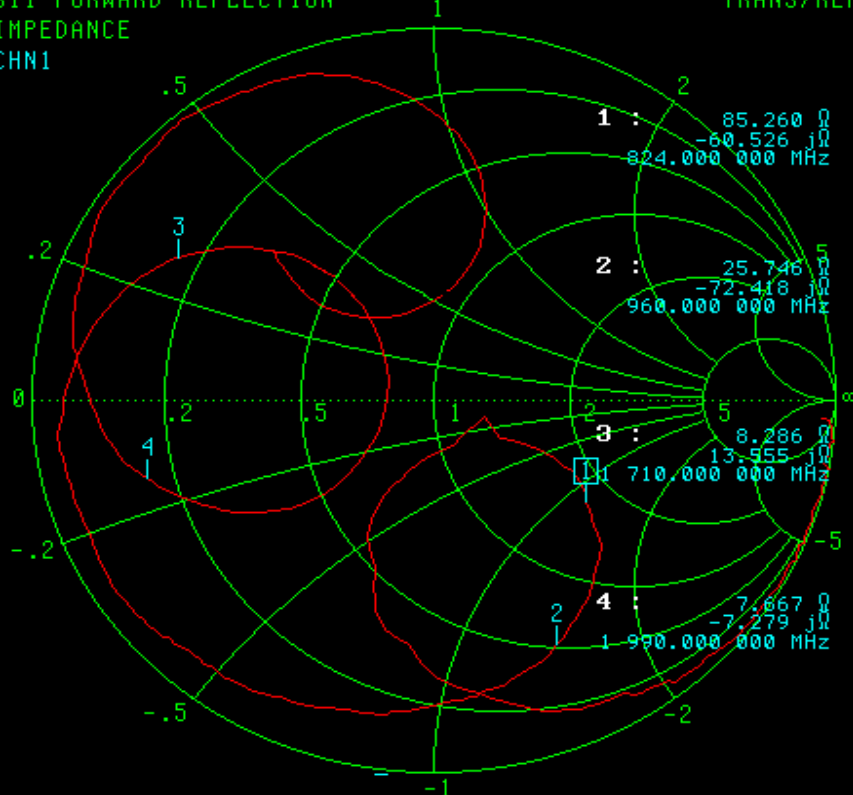
10.000 000 MHz

3 000.000 000 MHz

S11 FORWARD REFLECTION  
IMPEDANCE  
CHN1

TRANS/REFL

CH 1 - S11  
REFERENCE PLANE  
0.0000 mm



- 1: 824.000000 MHz  
85.260 Ω  
-60.526 jΩ
- 2: 960.000000 MHz  
25.746 Ω  
-72.418 jΩ
- 3: 1.710000000 GHz  
8.286 Ω  
13.555 jΩ
- 4: 1.990000000 GHz  
7.667 Ω  
-7.279 jΩ

MARKER TO PEAK

MORE

10.000 000 MHz - 3 000.000 000 MHz