GSM Antenna

MODEL: TH-80(ST)

GSM850/GSM900/DCS1800/PCS1900

1. GENERAL DESCRIPTION

Model No	P/N
TH80(ST)	TH80ST-SMA90

Below is a table summarizing the antenna design specification.

1.1 Electrical Properties

Parameter	Description
Frequency Band	800/900/1800/1900MHz
Nominal Impedance	50 ohm
Polarization	Vertical
Electrical Wave	4/1 λ Dipole
Return Loss	Please See Data-1
V.S.W.R	4.1：1
Antenna Average Gain	0 dBi
Note: Gain includes the cable loss	

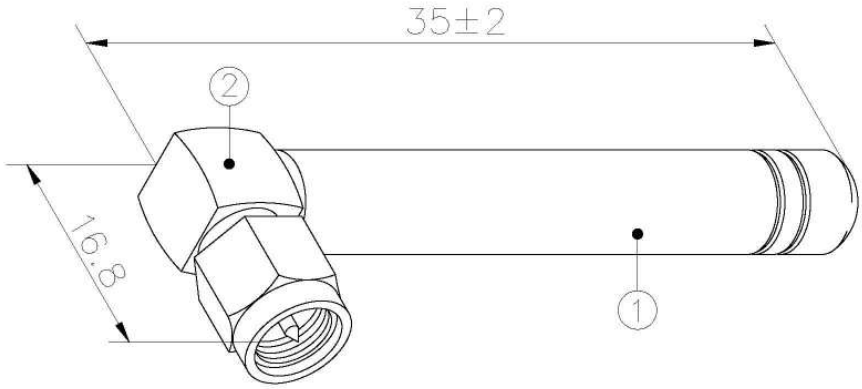
1.2 Mechanical Properties

Parameter	Description

Antenna Type	External Antenna
Antenna Material	PU
Touch Type	Screw Type
Connector Type	SMA 90°(Male)
Antenna Dimensions	35mm ±2
Antenna Color	Black
Operating Temperature Range	-20°C~+60°C
Storage Temperature Range	-30°C~+70°C

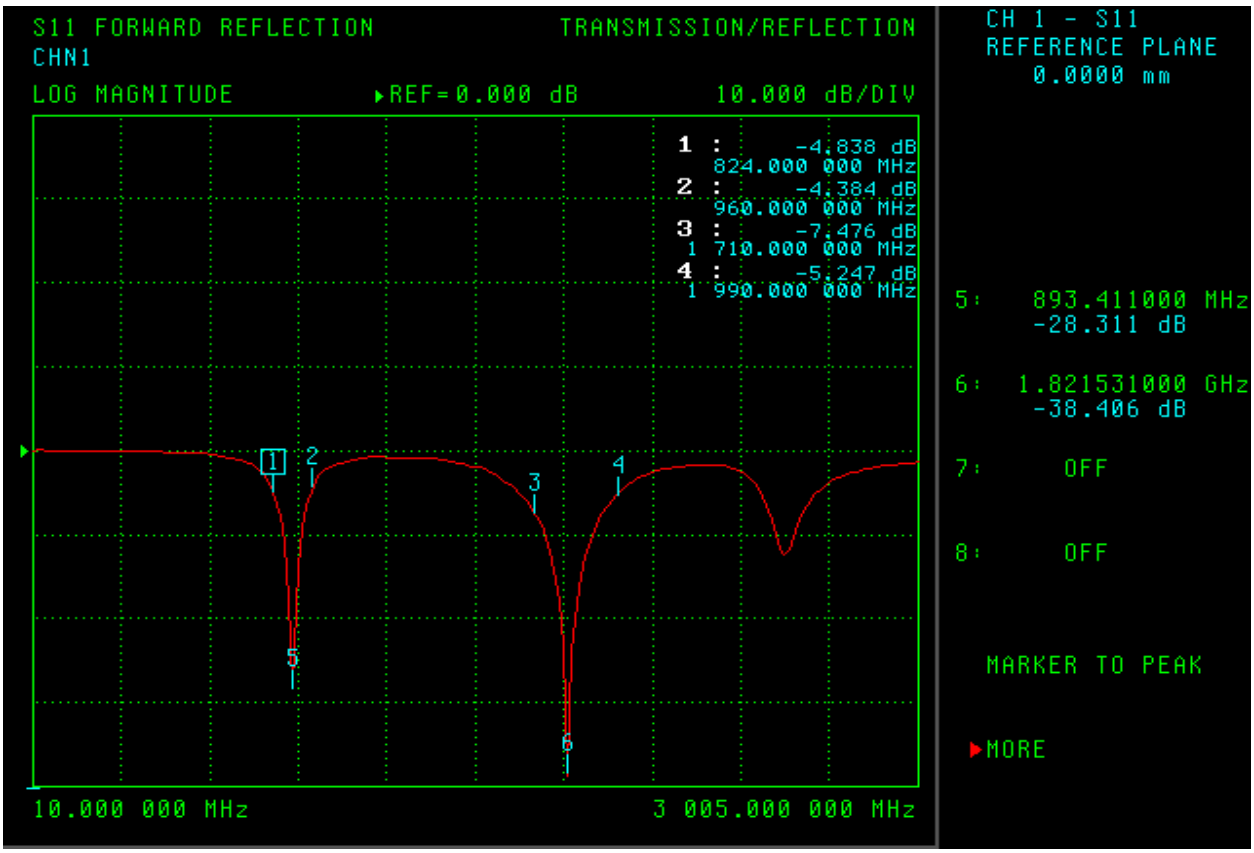
2. Appearance

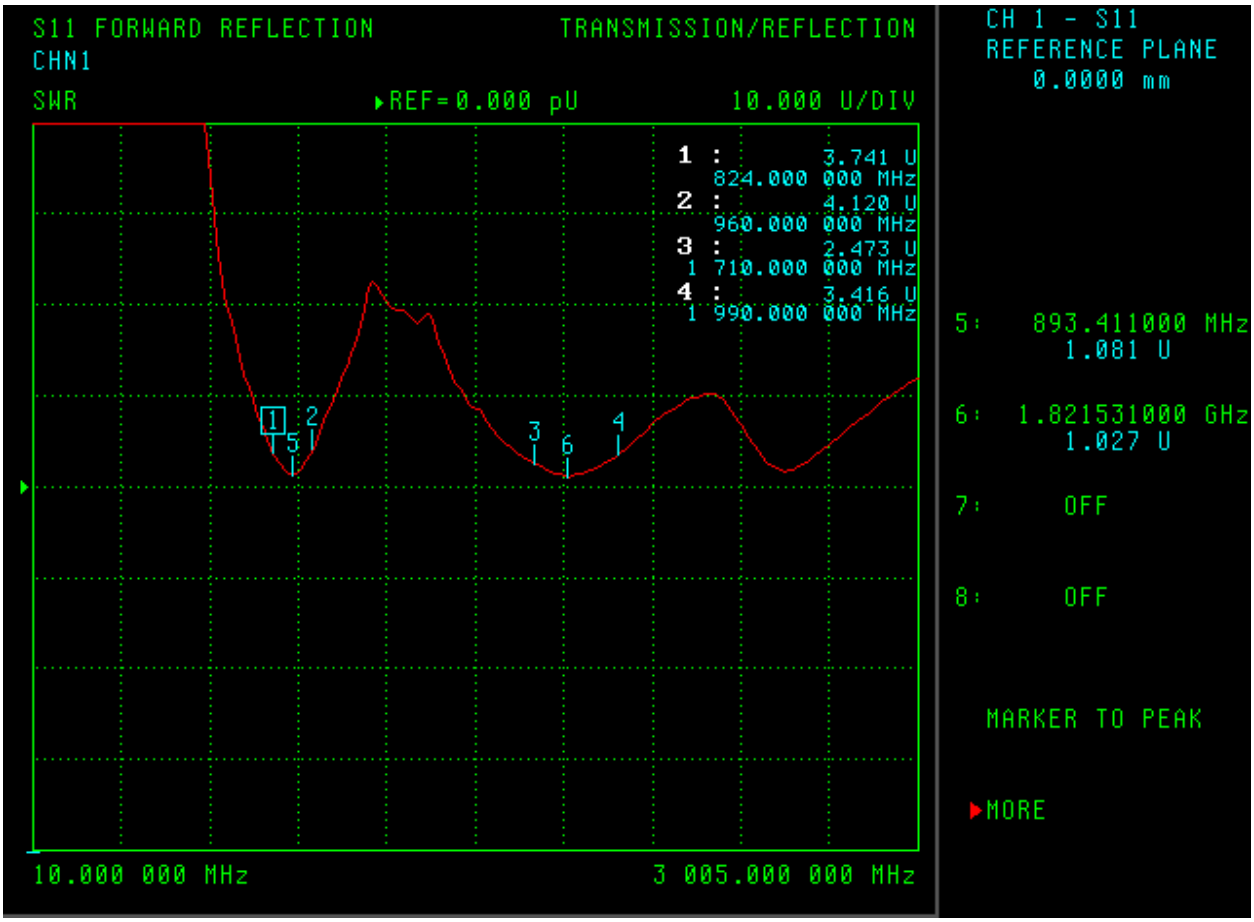
NO.	NAME	FINISH	Q,TY
01	Core tube	Black	01
02	SMA 90°(Male)	Nickel plating	01

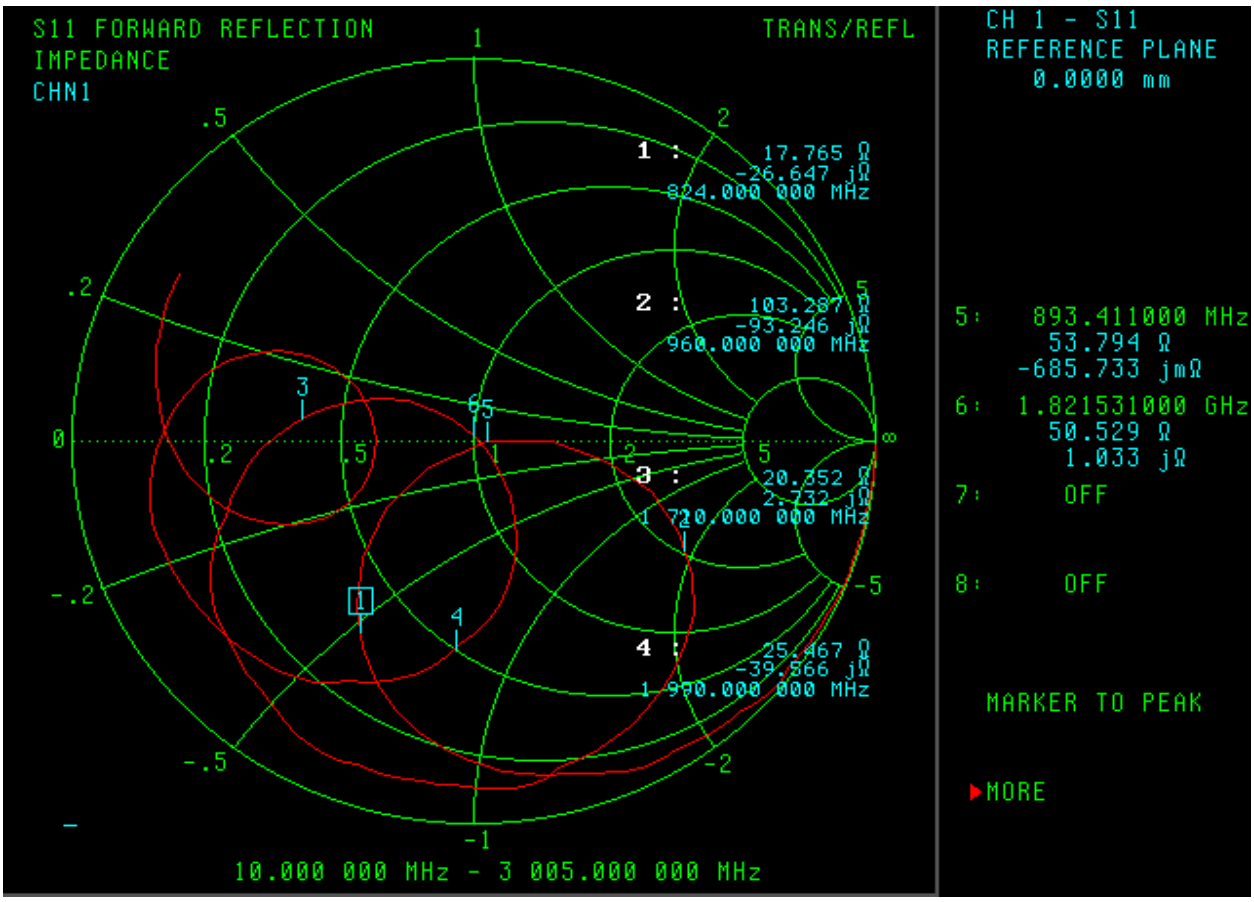


	CUSTOMER'S	MODEL	PARTS NUMBER	FREQUENCY	UNIT	SCALE	DATE	VERSION
Third angle projection				800/900/1800/1900MHz	M/M		20071225	1
	TOLERANCE	X.XX±0.15	NAME	PARTS NUMBER	APPROVED	CHECKED	DRAWING	DESIGNED
	SURFACE ROUGHNESS	S	APPEARANCE					

3. Frequency


S11 FORWARD REFLECTION
TRANSMISSION/REFLECTION
CHN1
LOG MAGNITUDE
▸REF=0.000 dB
10.000 dB/DIV
1 : -4.838 dB
824.000 000 MHz
2 : -4.384 dB
960.000 000 MHz
3 : -7.476 dB
1 710.000 000 MHz
4 : -5.247 dB
1 990.000 000 MHz
10.000 000 MHz
3 005.000 000 MHz
CH 1 - S11
REFERENCE PLANE
0.0000 mm
5: 893.411000 MHz
-28.311 dB
6: 1.821531000 GHz
-38.406 dB
7: OFF
8: OFF
MARKER TO PEAK
▸MORE


S11 FORWARD REFLECTION
TRANSMISSION/REFLECTION
CHN1
SWR
▸REF=0.000 pU
10.000 U/DIV
1 : 3.741 U
824.000 000 MHz
2 : 4.120 U
960.000 000 MHz
3 : 2.473 U
1 710.000 000 MHz
4 : 3.416 U
1 990.000 000 MHz
10.000 000 MHz
3 005.000 000 MHz
CH 1 - S11
REFERENCE PLANE
0.0000 mm
5: 893.411000 MHz
1.081 U
6: 1.821531000 GHz
1.027 U
7: OFF
8: OFF
MARKER TO PEAK
▸MORE


S11 FORWARD REFLECTION
IMPEDANCE
CHN1
TRANS/REFL
1 : 17.765 Ω
-26.647 jΩ
824.000 000 MHz
2 : 103.287 Ω
-93.246 jΩ
960.000 000 MHz
3 : 20.352 Ω
2.732 jΩ
1 720.000 000 MHz
4 : 25.467 Ω
-39.566 jΩ
1 990.000 000 MHz
10.000 000 MHz - 3 005.000 000 MHz
CH 1 - S11
REFERENCE PLANE
0.0000 mm
5: 893.411000 MHz
53.794 Ω
-685.733 jmΩ
6: 1.821531000 GHz
50.529 Ω
1.033 jΩ
7: OFF
8: OFF
MARKER TO PEAK
▶MORE