

# VHF ANTENNA

Model : TH-169



## 1. GENERAL DESCRIPTION

Model No	P/N
TH169	TH169-SMA(M)

Below is a table summarizing the antenna design specification.

### 1.1 Electrical Properties

Parameter	Description
Frequency Band	169Mhz
Nominal Impedance	50 ohm
Polarization	Vertical
Electrical Wave	Dipole
Return Loss	Please See Data-1
V.S.W.R	2.0 : 1 at center
Note: Gain includes the cable loss	

### 1.2 Mechanical Properties

Parameter	Description
Antenna Type	External Antenna
Touch Type	Screw Type
Connector Type	SMA 180°(Male)
Antenna Dimensions	85.4mm $\pm$ 2
Antenna Color	Black

Operating Temperature Range	-20°C~+70°C
Storage Temperature Range	-30°C~+80°C

## 2. Appearance

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

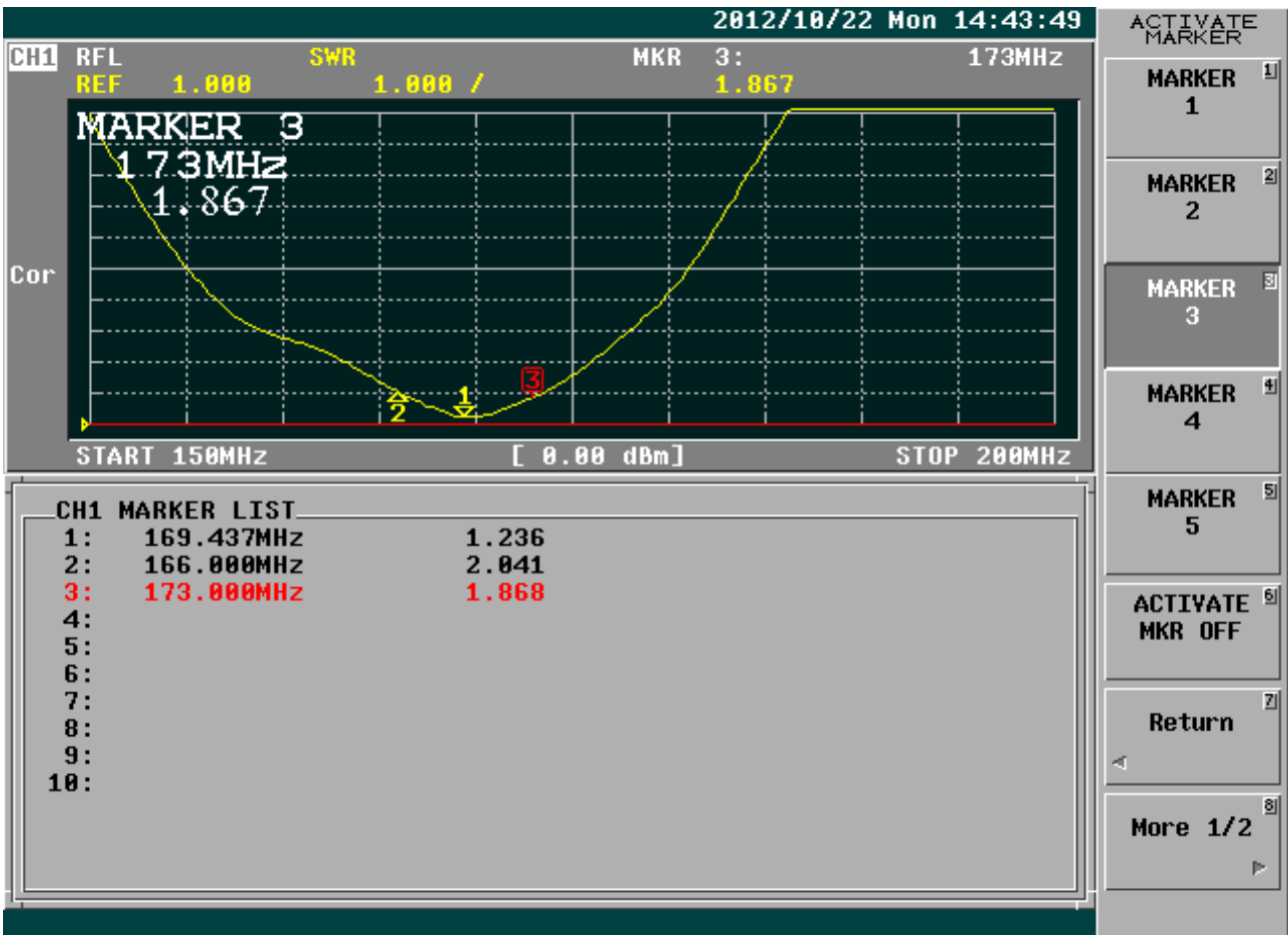
Technical drawing showing a core tube with SMA (Male) connector. Dimensions include  $\phi 13$ ,  $1/4-36UNS$ ,  $85.4 \pm 2$ , and  $\phi 12.8$ . Callouts 1 and 2 are present.

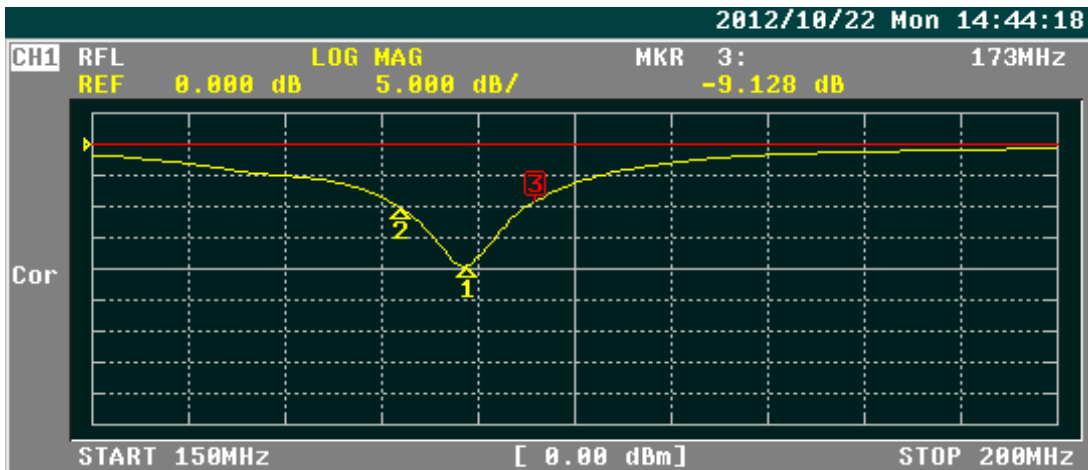
CUSTOMER'S	MODEL	PARTS NUMBER	FREQUENCY	UNIT	SCALE	DATE	VERSION
			180MHz	V/M		20121016	1

TOLERANCE	Y, XX+0.15	NAME	PARTS NUMBER	APPROVED	CHECKED	DRAWING	DESIGNED
SURFACE ROUGHNESS	$\sqrt{R}$	APPEARANCE					

### 3. Frequency





CH1 MARKER LIST

1:	169.437MHz	-19.533 dB
2:	166.000MHz	-10.576 dB
3:	173.000MHz	-9.128 dB
4:		
5:		
6:		
7:		
8:		
9:		
10:		

FORMAT

LOG MAG 1

PHASE 2

DELAY 3

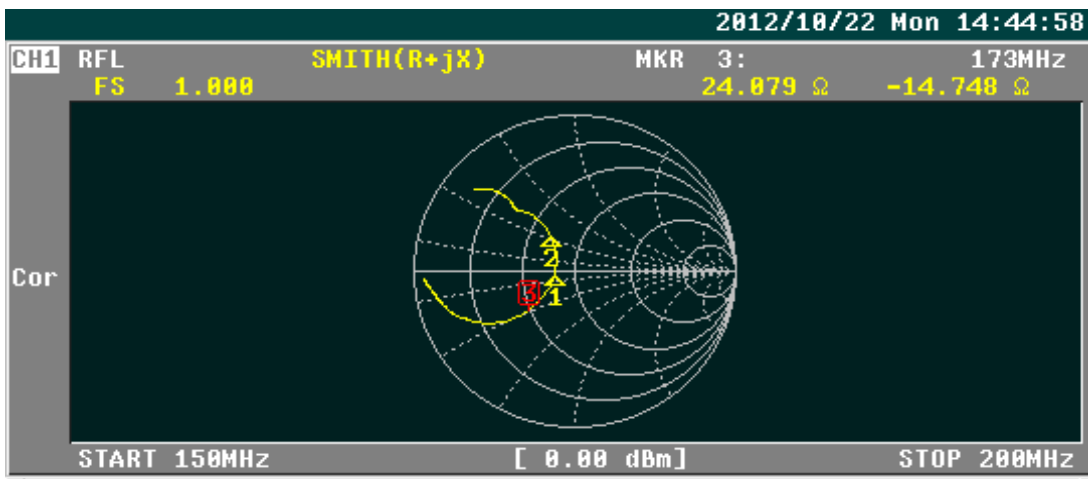
SMITH (R+jX) 4

SMITH (G+jB) 5

POLAR 6

LIN MAG 7

More 1/2 8



CH1 MARKER LIST

1:	169.437MHz	38.488 Ω	-3.384 Ω	277.508pF
2:	166.000MHz	34.322 Ω	16.309 Ω	15.636nH
3:	173.000MHz	24.888 Ω	-14.856 Ω	61.925pF
4:				
5:				
6:				
7:				
8:				
9:				
10:				

FORMAT

LOG MAG 1

PHASE 2

DELAY 3

SMITH (R+jX) 4

SMITH (G+jB) 5

POLAR 6

LIN MAG 7

More 1/2 8