

2.4/5.8G WIFI Antenna

MODEL: TH-2458J



1.. GENERAL DESCRIPTION

Model No	P/N
TH-2458J	TH2458J-SMA(M)

Below is a table summarizing the antenna design specification.

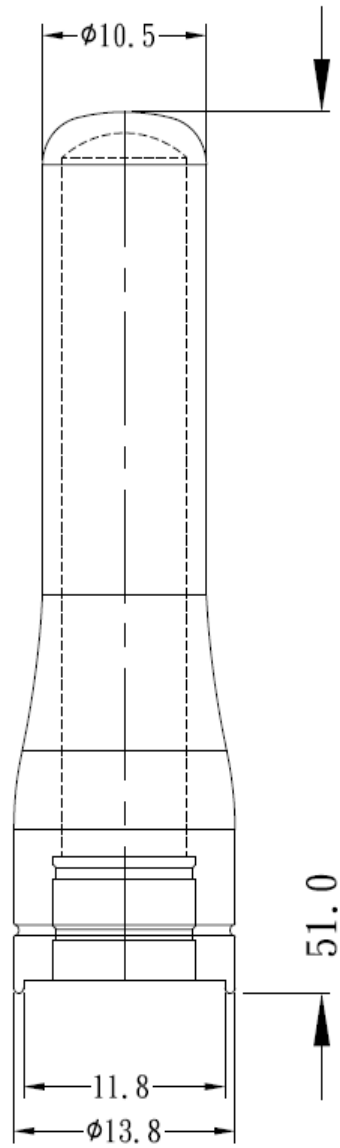
1.1 Electrical Properties

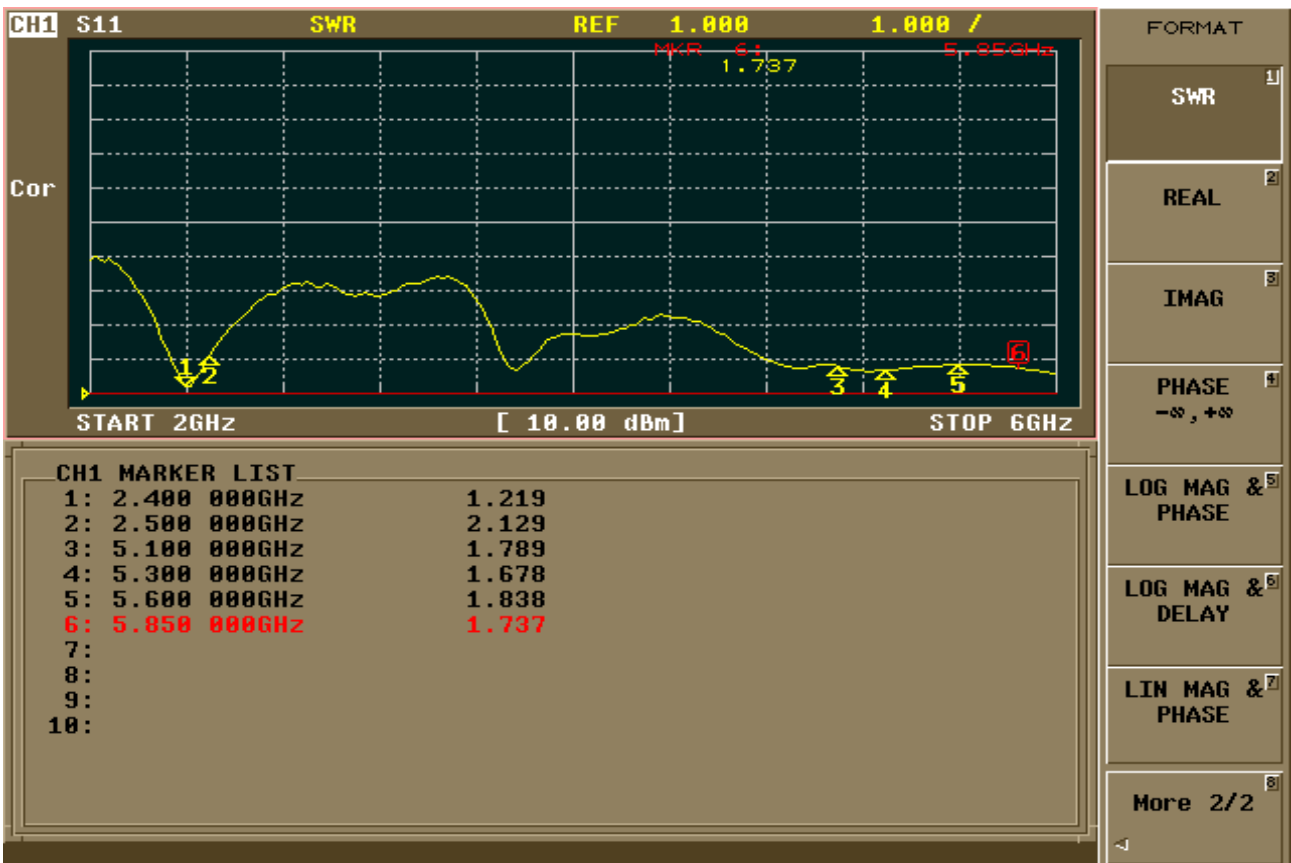
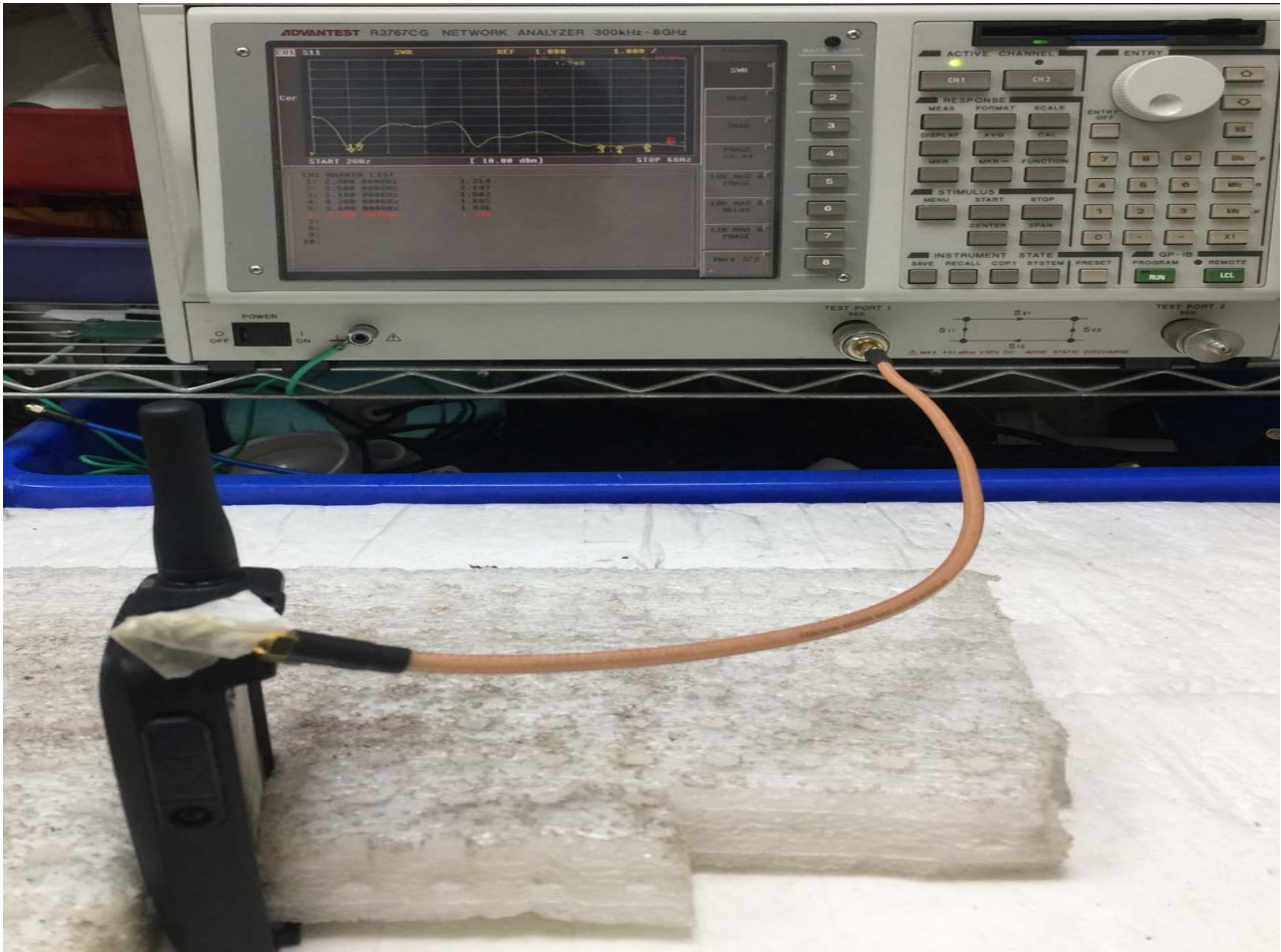
Parameter	Description
Frequency Band	2.4~2.5 & 5.1~5.85GHz
Nominal Impedance	50 ohm
Polarization	Vertical
Electrical Wave	1 / 4 λ
Admitted Power radiation	1W
V.S.W.R	3.0:1 Max
Antenna Gain	0~3 dB
Note: Gain includes the cable loss	

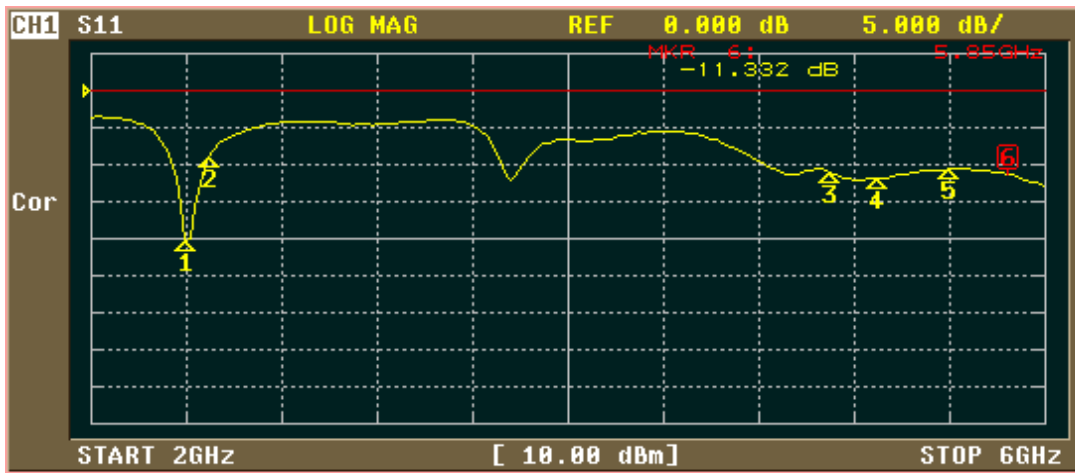
1.2 Mechanical Properties

Parameter	Description
Antenna Type	External Antenna
Material	TPU (UL94-V0)
Touch Type	Screw Type
Connector Type	SMA (Male)

Antenna Dimensions	OD13.8x 51.0mm±0.5
Antenna Color	Black
Operating Temperature Range	-40°C~+80°C
Storage Temperature Range	-40°C~+80°C
Waterproof	IPX7 (Must match the silicone pad - optional)







CH1 MARKER LIST

1:	2.400 000GHz	-20.256 dB
2:	2.500 000GHz	-8.845 dB
3:	5.100 000GHz	-10.959 dB
4:	5.300 000GHz	-11.938 dB
5:	5.600 000GHz	-10.565 dB
6:	5.850 000GHz	-11.332 dB
7:		
8:		
9:		
10:		

FORMAT

LOG MAG 1

PHASE 2

DELAY 3

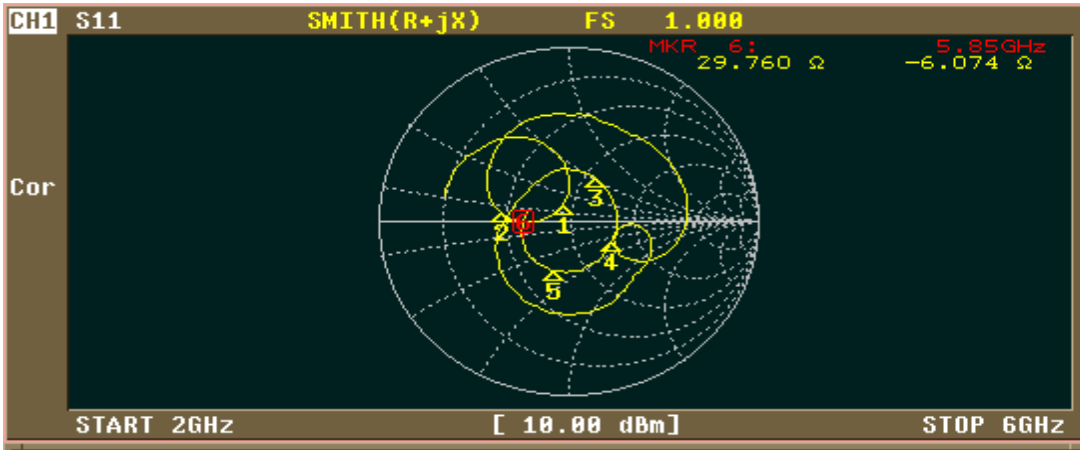
SMITH (R+jX) 4

SMITH (G+jB) 5

POLAR 6

LIN MAG 7

More 1/2 8



CH1 MARKER LIST

1:	2.400 000GHz	46.236 Ω	8.579 Ω	568.932pH
2:	2.500 000GHz	23.708 Ω	2.947 Ω	187.666pH
3:	5.100 000GHz	57.234 Ω	30.906 Ω	0.964nH
4:	5.300 000GHz	75.598 Ω	-19.015 Ω	1.579pF
5:	5.600 000GHz	36.748 Ω	-22.614 Ω	1.256pF
6:	5.850 000GHz	29.760 Ω	-6.074 Ω	4.478pF
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

Frequency (MHz)	2400	2450	2500	5150	5250	5350	5470	5600	5725	5785	5850
Peak Gain (dBi)	0.11	2.68	3.65	1.18	1.72	2.29	2.59	3.5	3.3	2.52	2.38
Efficiency (%)	30.51	49.94	60.79	65.07	68.29	73.25	73.83	70.94	63.88	62.62	62.31

