

Z25401840F1176&1575(1+0)

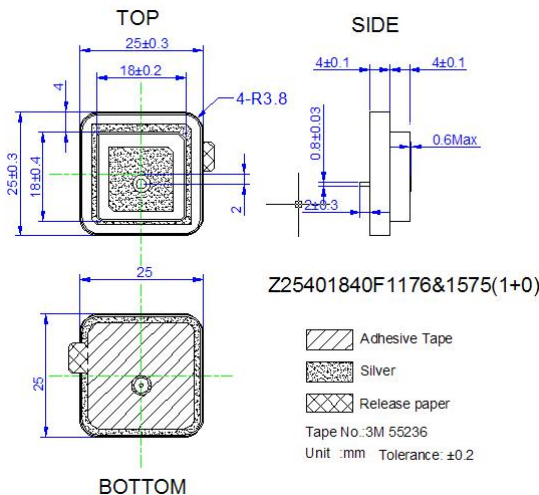
ENGINEERING SPECIFICATION

1. Typical Electrical Properties (RoHS compliance)

Characteristics	Specification	Unit	Conditions
Center Frequency 1	1176	MHz	@50*50 Ground
Band Width	RL ≤ -10dB	6	@50*50 Ground
	Gain ≥ 0dBic	10	@50*50 Ground
Gain(Zenith)@Fo	3.0	dBic typ	@50*50 Ground
Axial ratio@Fo	≤ 3	dB	@50*50 Ground
Return Loss @Fo	≤ -15	dB	@50*50 Ground
Polarization	R.H.C.P		
Frequency Temperature Coefficient	0 ± 20	ppm/°C	-40°C to +85°C

Characteristics	Specification	Unit	Conditions
Center Frequency 2	1575	MHz	@50*50 Ground
Band Width	RL ≤ -10dB	22	@50*50 Ground
	Gain ≥ 0dBic	49	@50*50 Ground
Gain(Zenith)@Fo	5.0	dBic typ	@50*50 Ground
Axial ratio@Fo	≤ 3	dB	@50*50 Ground
Return Loss @Fo	≤ -15	dB	@50*50 Ground
Polarization	R.H.C.P		
Frequency Temperature Coefficient	0 ± 20	ppm/°C	-40°C to +85°C

2. Dimension(Unit:mm)



UNLESS OTHER SPECIFIED TOLERANCES ON :
X=±0.3 X.X=±0.2 X.XX=± 0.1
ANGLES = ±2° **HOLEDIA = ±0.1**

**TONGXUN PRECISION
TECHNOLOGY CO., LTD.**

SCALE : 1:1

UNIT : mm

DRAWN BY : 梁杰

CHECKED BY : 凌志辉

DESIGNED BY : 凌志辉

APPROVED BY : 许慧云

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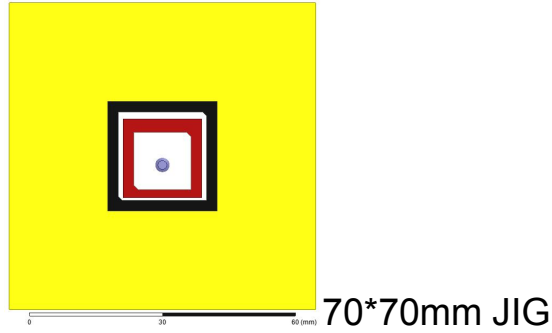
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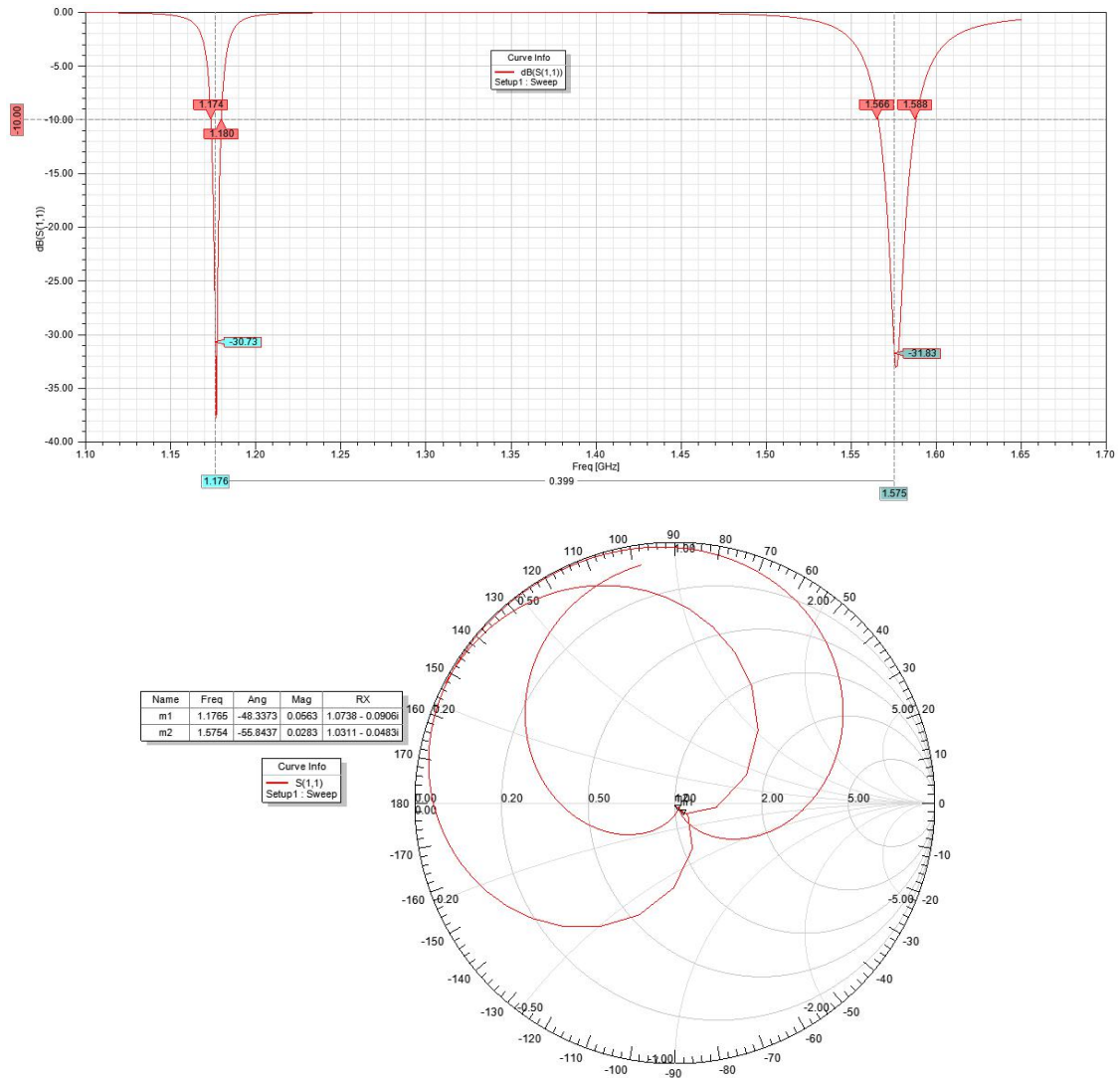
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PAGE REV.
A0

3. Test Condition Ground Plane(Unit:mm; Materials:Brass)



4. Measured Smith Chart & Return Loss



UNLESS OTHER SPECIFIED TOLERANCES ON :
 X=±0.3 X.X=±0.2 X.XX=± 0.1
 ANGLES=±2° HOLEDIA= ±0.1

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PAGE REV.
 A0

5. Material



No.	Description	Material	Specification
5.1	Antenna Substrate	Microwave dielectric	NPO37 : 37.0 ± 2 NPO45 : 45 ± 1
5.2	Pin	Copper and Silver-plated	
5.3	Electrode	Ag Plated	
5.4	Adhesive Type	3M 55236	Thickness: 0.15 ± 0.1 mm
5.5	Sn	Sn:Ag:Cu	96.5:3:0.5

6. Gain&Axial Ratio

Gorund	Band	Frequency(MHz)	RHCP Gain(dBic)	AxialRatio(dB)	Efficiency
70x70	GPS L5	1164	-5.67	20.00	19.8%
		1169	-2.14	16.20	38.5%
		1174	1.34	6.28	61.9%
		1176	2.20	0.58	64.4%
		1180	0.43	12.02	55.6%
		1185	-3.60	20.00	27.8%
		1189	-6.14	20.00	16.6%
	GPS L1	1555	-0.99	19.12	39.6%
		1561.09	1.08	14.03	54.9%
		1565	2.44	10.54	65.8%
		1570	3.79	5.47	74.9%
		1575.42	4.35	1.54	76.9%
		1580	3.82	6.35	75.1%
		1585	2.60	11.56	67.5%
		1590	1.33	16.93	57.5%
		1595	0.13	20.00	47.6%
		1600	-1.14	20.00	38.0%
		1605	-2.12	20.00	31.8%
		1610	-3.12	20.00	26.3%

UNLESS OTHER SPECIFIED TOLERANCES ON :
 X= ± 0.3 X.X= ± 0.2 X.XX= ± 0.1
 ANGLES= $\pm 2^\circ$ HOLEDIA= ± 0.1

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