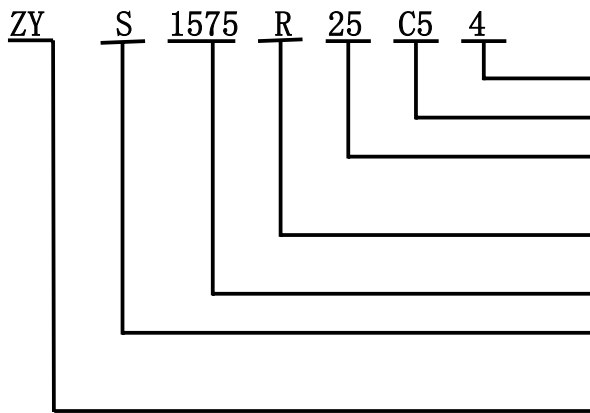


1. Introduction

JWC Technologies' microwave dielectric antenna elements and its series are designed to be used for GPS. The patch antenna with compact size incorporates a rectangular micro-strip design for GPS C/A right-hand circular polarization wave reception, featuring low RL, low Axial Ratio but high gain, etc. This product is ROHS complaint

2. Part Number



Thickness: 4mm

Center frequency: 1579Mhz

Dimension: 25mmx25mm

Polarization: R=Right-hand circular

Character Frequency: 1575 MHz

Structure: Single Deviation

Square Dielectric Antenna

3. Structure and Material

表 1

No.	Description	Structure and Material
4.1	Antenna Substrate	Dielectric Ceramics
4.2	Pin	Copper and tin-plated
4.3	Electrode	Ag Plated
4.4	Ground Base	Ag Plated
4.5	Adhesive type	3M

4. Dimension

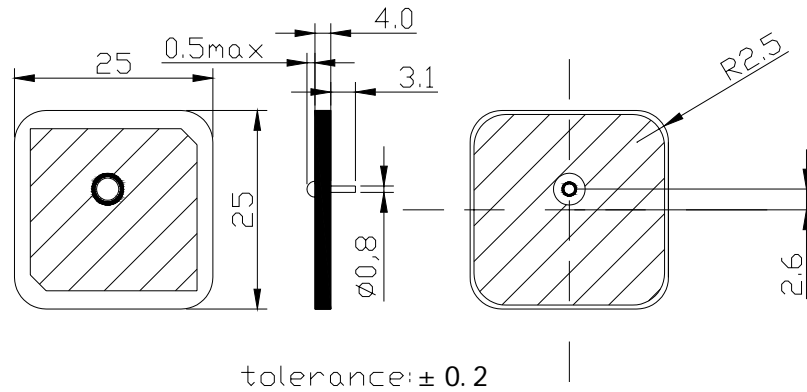


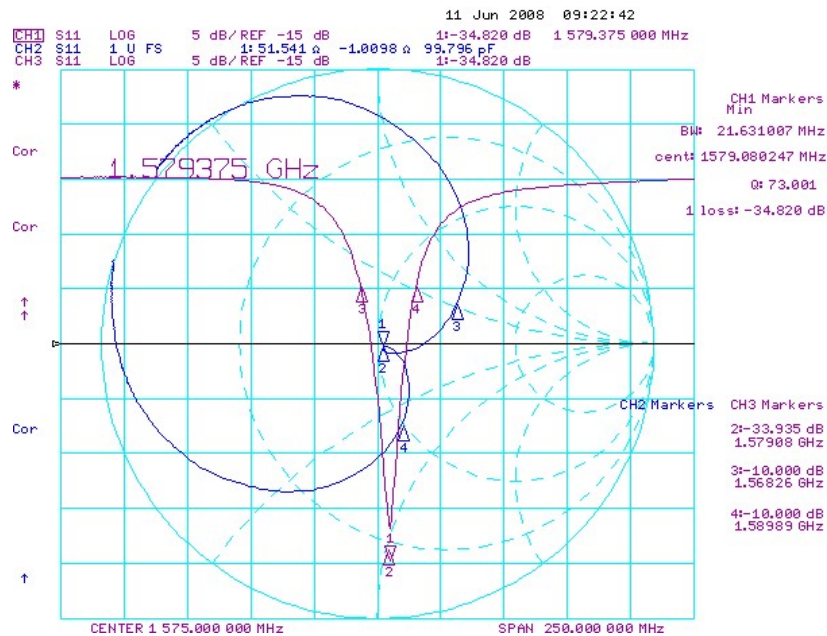
图 1 dimension

5. Electrical Characteristics

表 2

No.	Item	Specifications	Post Environmental Tolerance
5.1	Range of Receiving Frequency(Mhz)	1575	±2.5
5.2	Center Frequency (Mhz) (with A GND Plane)	1579	±2.0
5.3	Band With (Mhz) (Return loss ≤-10dB)	≥10	±0.5
5.4	V.S.W.R(in Center Frequency)	≤1.5	±0.5
5.5	Gain(Zenith) (dBi typ)	4.5dB typical	—
5.6	Axial Ratio	5dB max	—
5.7	Polarization	Right-Handed Circular	—
5.8	Impedance (Ω)	50	—
5.9	Frequency Temperature Coefficient (ppm/°C)	0±10	—

6. Characteristic curve



7. Reliability:

MTBF \geq 93709h

Test Condition:

Temperature: 80°C
Quantity: 20pcs
Sustained Time: 240h
Relative Humidity: 85%
Reliability: 90%

8. Note:

1. This product specification guarantees the quality of our product as a single unit. Please make sure that your product is evaluated and confirmed against your specifications when our product is mounted to your product.
2. We cannot warrant against failure caused by any use of our product that deviates from the intended use as described in this product specification.
3. The product will get free warranty for three months since the date of purchase users operate in the correct way; users will have to pay cost of the materials and maintaining fee out of the condition.
4. Electrostatic sensitive device. Please follow the antistatic precautions for handling.

