



Antenna Datasheet

Product OC: Y0SGA0CA0CA

Version: 1.0

Date: 2026-06-12

Product Name: FPC BT Antenna

Key Features:

Frequency Band: 2400–2500 MHz

Dimensions: 21.6 mm × 12.24 mm

Efficiency: Up to 53.05%

RoHS and REACH Compliant

Contents

Contents	1
1 Specification	2
1.1. Electrical	2
1.2. Mechanical & Environmental	2
1.3. Antenna Assembly	3
2 Drawing	4
3 Detailed Performance	5
3.1. S-Parameter Test	5
3.1.1. VSWR	5
3.2. Radiation Performance Test.....	6
3.2.1. Efficiency.....	6
3.2.2. Peak Gain	7
3.2.3. 2D Radiation Pattern	8
4 Packaging	10
Contact Us.....	12
Legal Notices	13
Revision History	15

1 Specification

Test Condition: Assembled in test device

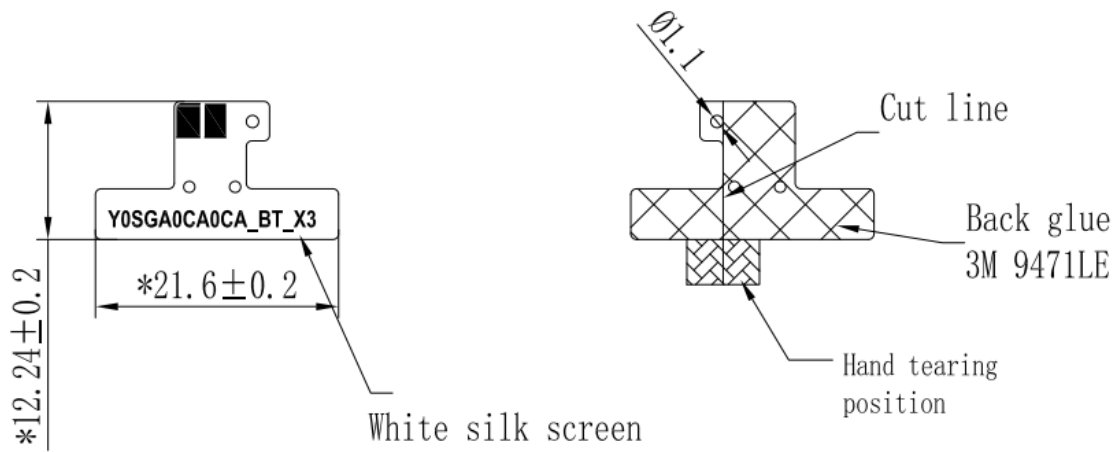
1.1. Electrical

Electrical	
Frequency Range	2400–2500 MHz
Impedance	50 Ω
Polarization	Linear
Radiation Pattern	Omni-directional
VSWR	≤ 1.8
Peak Gain	0.8 dBi

1.2. Mechanical & Environmental

Mechanical	
Antenna Dimensions	21.6 mm × 12.24 mm
Material & Color	FPC & Black
Weight	Typ. 0.04 g
Mounting Type	Adhesive
Environmental	
Operation Temperature	-40 °C to +85 °C
Storage Temperature	-40 °C to +85 °C
RoHS & REACH Compliant	Yes

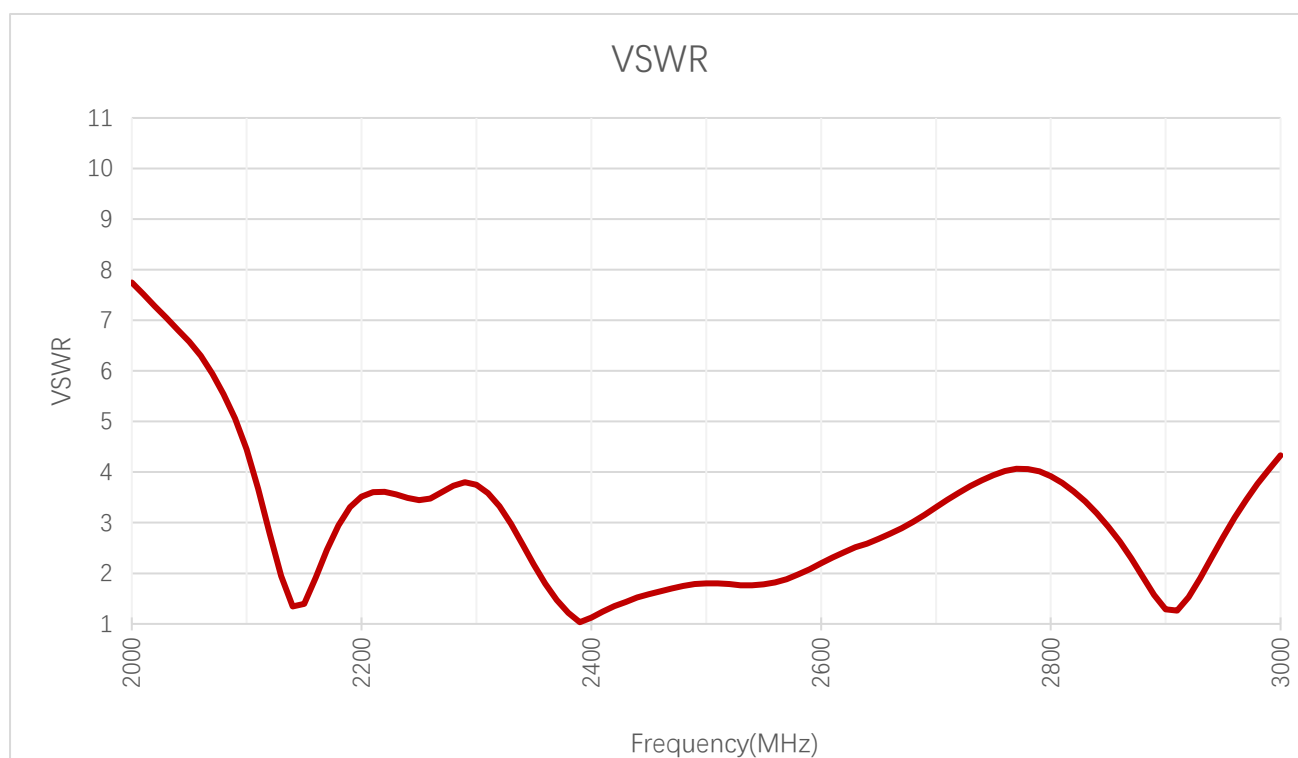
2 Drawing



3 Detailed Performance

3.1. S-Parameter Test

3.1.1. VSWR

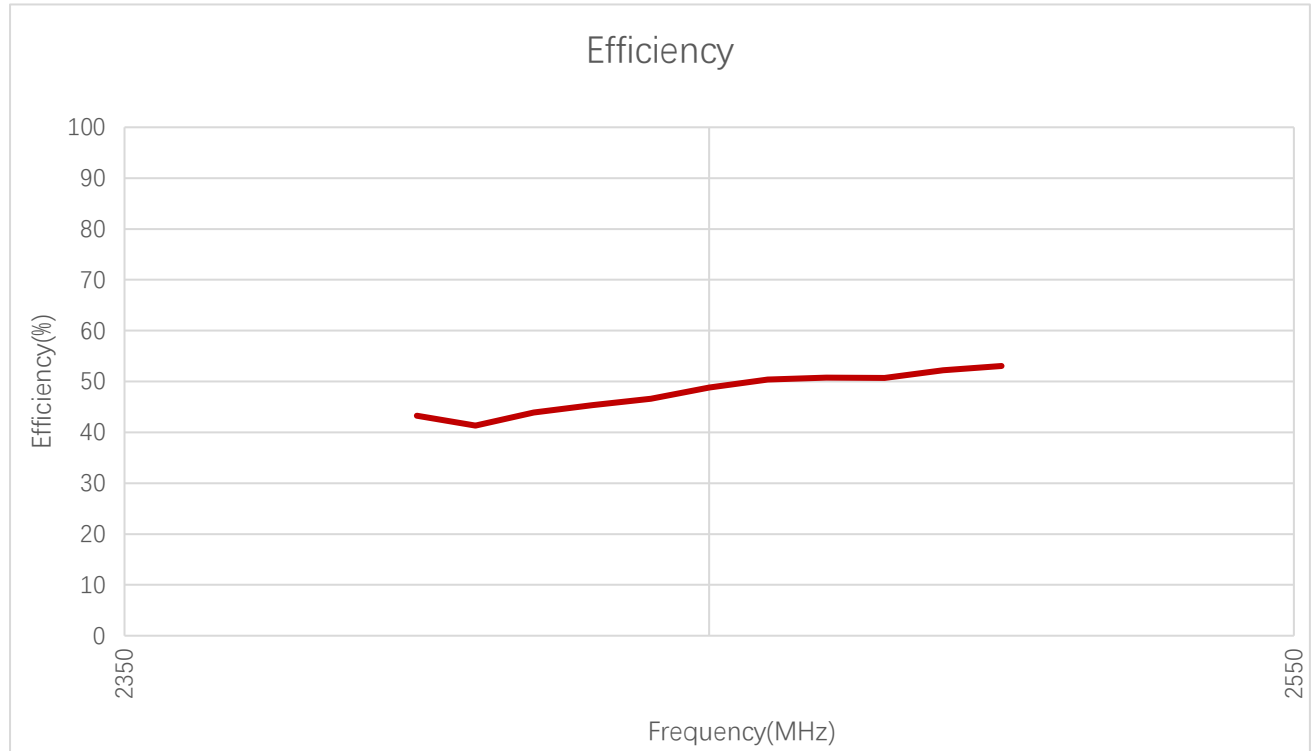


VSWR

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
VSWR	1.1	1.6	1.8	-	-	-	-	-	-	-

3.2. Radiation Performance Test

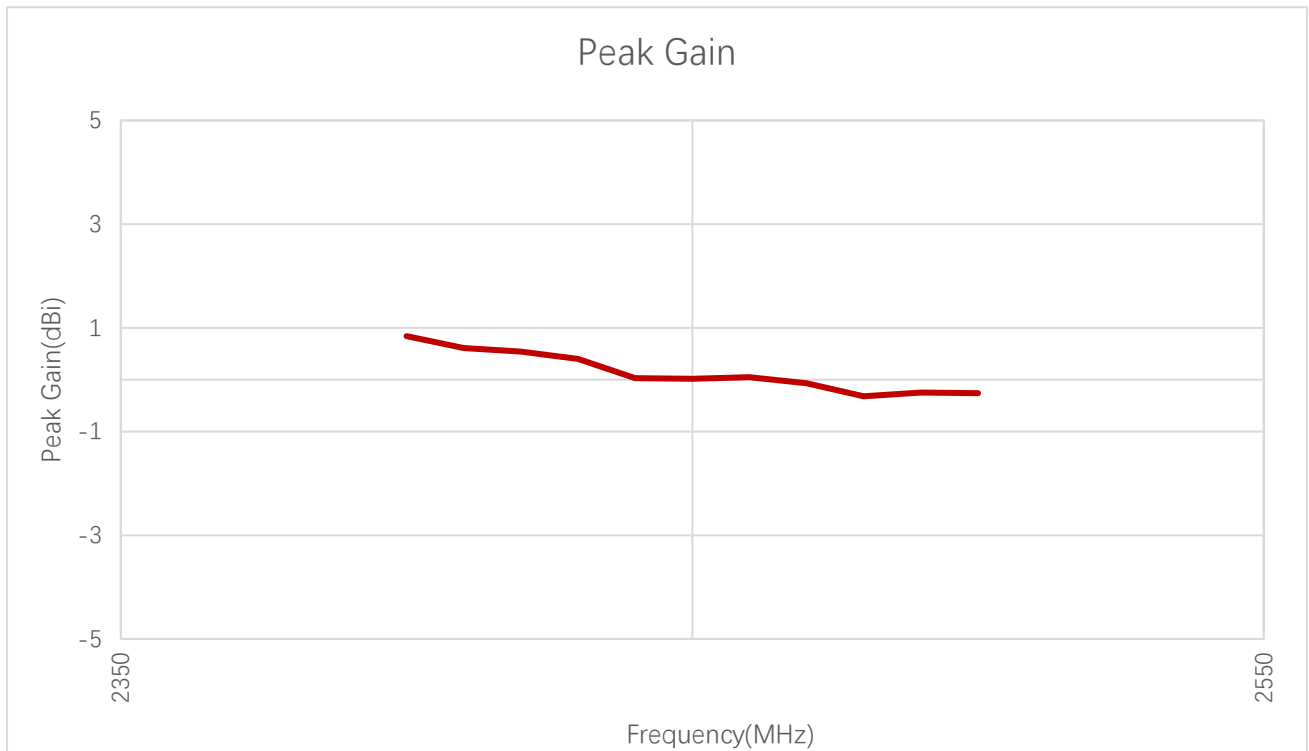
3.2.1. Efficiency



Efficiency (%)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
Efficiency (%)	43.3	48.8	53.1	-	-	-	-	-	-	-

3.2.2. Peak Gain

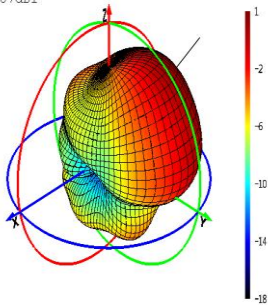


Peak Gain (dBi)

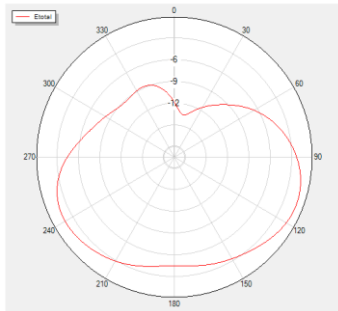
Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
Peak Gain (dBi)	0.8	0.0	-0.3	-	-	-	-	-	-	-

2400 MHz

MAX:0.84dBi
MIN:-18.87dBi

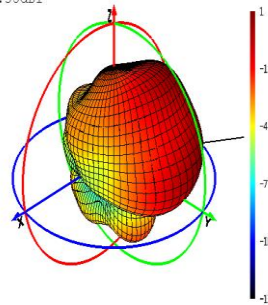


Theta=90 Freq=2400MHz

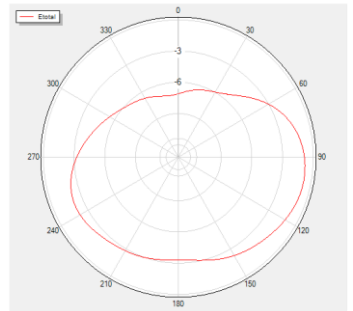


2450 MHz

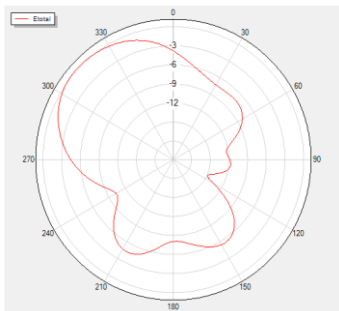
MAX:0.02dBi
MIN:-14.35dBi



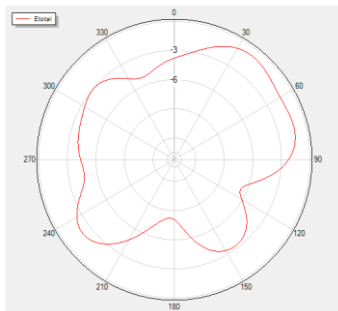
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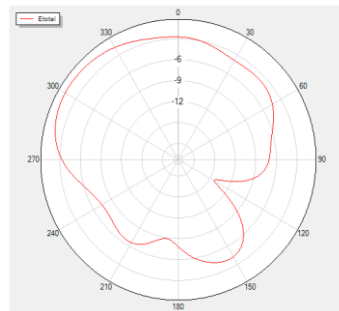
Phi=0 Freq=2400MHz



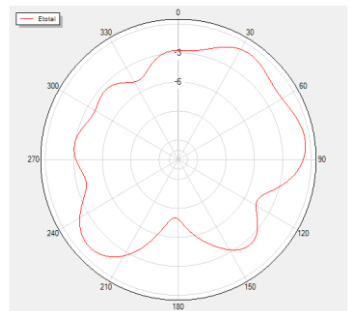
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Phi=0 Freq=2450MHz

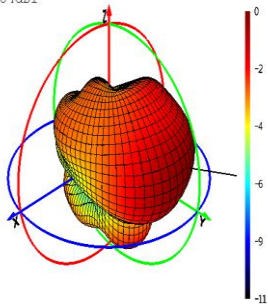


Phi=90 Freq=2450MHz

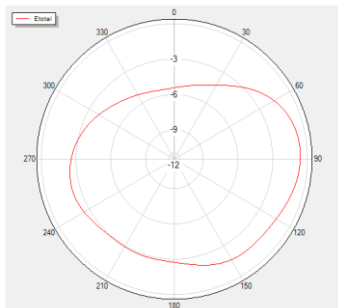


2500 MHz

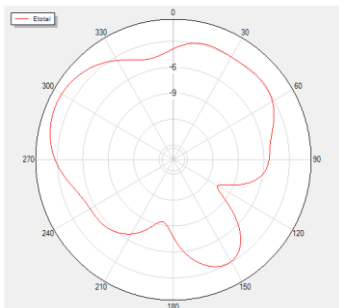
MAX:-0.26dBi
MIN:-11.84dBi



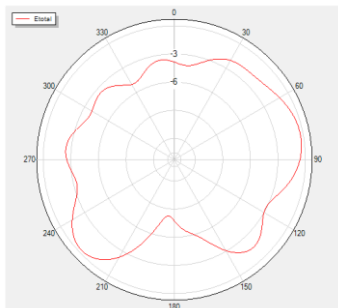
Theta=90 Freq=2500MHz



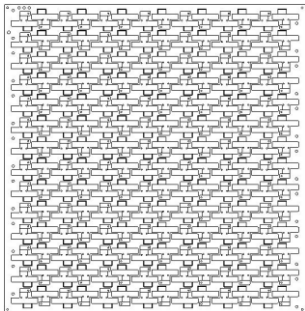
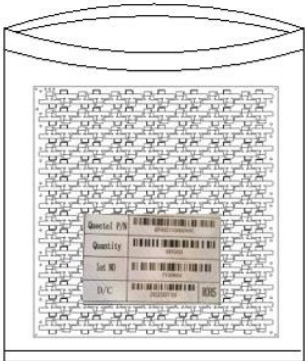
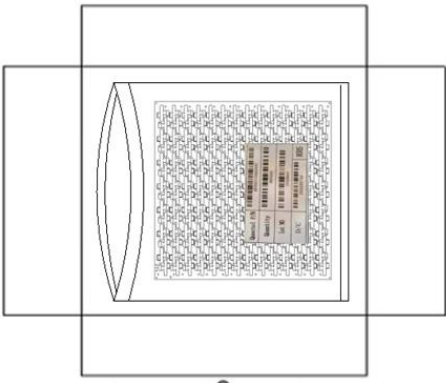
Phi=0 Freq=2500MHz

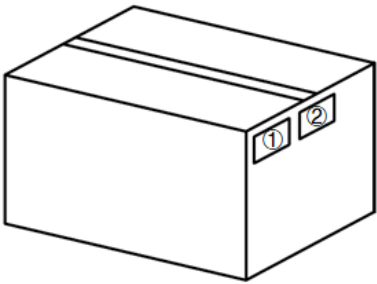
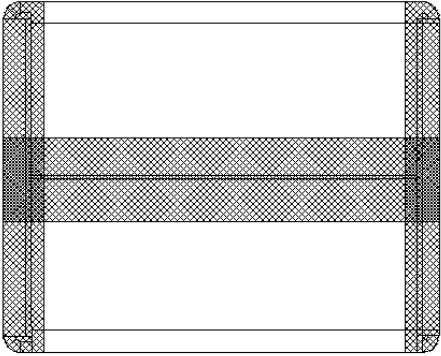


Phi=90 Freq=2500MHz



4 Packaging

Step	Packaging Picture / 2D Picture	Description
1		Micro-film packaging 190 antennas in a film.
2		20 films in a PE bag. (3800 Antennas / PE Bag)
3		(15 PE Bags / Carton Box) (57000 Antennas / Carton Box) Estimated quantity Products that cannot fill the entire carton box are packed in a suitable size carton box. <u>Carton Size:</u> <u>L × W × H = 310 × 270 × 140 mm</u>

4		Position for Attaching Labels ① Carton Label ② Quality Label
5		Sealing Cartons H-shaped sealing cartons
Note	The initial packaging method described above is for reference only, and the final actual packaging method shall be subject to the actual shipping packaging.	

Contact Us

At Quectel, our aim is to provide timely and comprehensive services to our customers. If you require any assistance, please contact our headquarters:

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Or our local offices. For more information, please visit:

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Revision History

Version	Date	Author	Note
-	2026-06-12	Owen Deng/ Lucky Feng/ Riva Ren/ Rainey Liao	Creation of the document
1.0	2026-06-12	Owen Deng/ Lucky Feng/ Riva Ren/ Rainey Liao	First official release



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