

SR23 天线规格书

SR23 Antenna Specification

智能戒指
Everbeat Ring
SR23

文件编号: DHF-SR23-HW-F05

版次: A/0

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1 Component

SR23 Antenna

2 Features

1. Stable and reliable in performances
2. Low temperature coefficient of frequency
3. Low profile, compact size
4. RoHS compliance

3 Applications

Everbeat Ring

4 Description

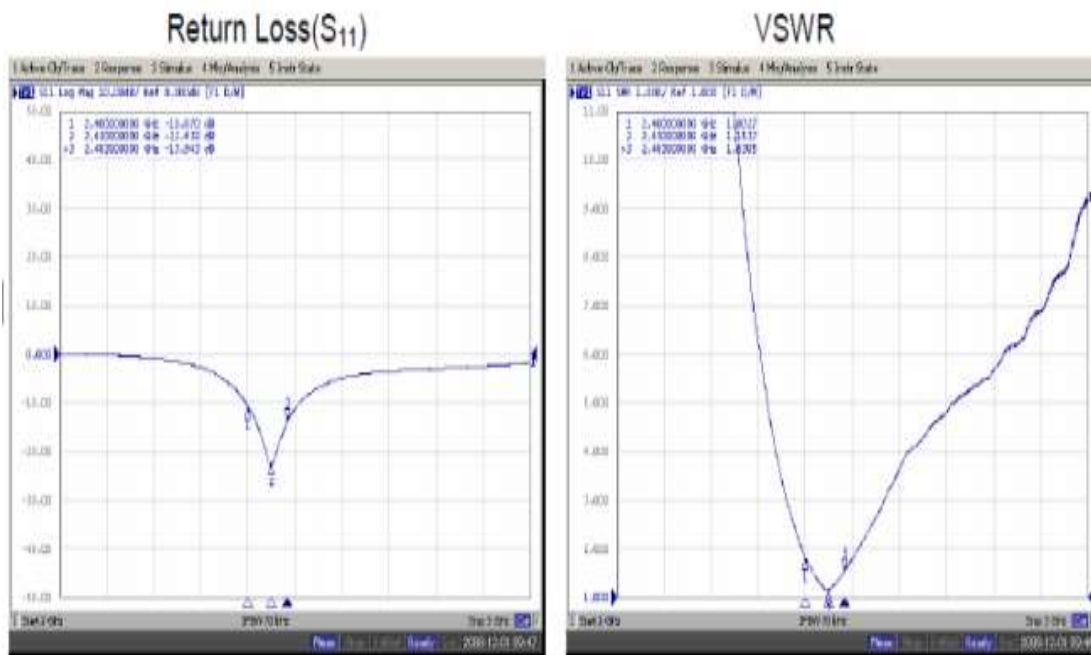
The antenna is specially designed for Bluetooth applications. Based on proprietary design and processes, this antenna has excellent stability and sensitivity to consistently provide high signal reception efficiency.

5 Electrical Specifications

5.1 Table

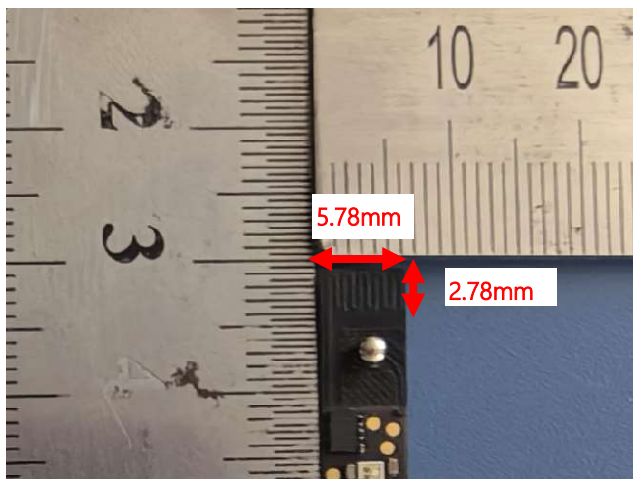
Characteristics		Specifications	Unit
Outline Dimensions		5.78×2.78	mm
Working Frequency		2442	MHz
Bandwidth (under -10dB return loss)		100min	MHz
VSWR		2MAX.	
Impedance		50	Ω
Polarization		Linear Polarization	
Gain**	Peak	0.95 (typical)	dBi
	Efficiency	84 (typical)	%
Temperature Coefficient of Frequency		0±20max (@-40°C~85°C)	ppm/°C
** Working frequency will be offset to another frequency according to the conditions of users ground plane and radome.			
**The data was measured by A Test Lab Techno Corp. (CTIA Authorized Test Lab).			

5.2 Graph



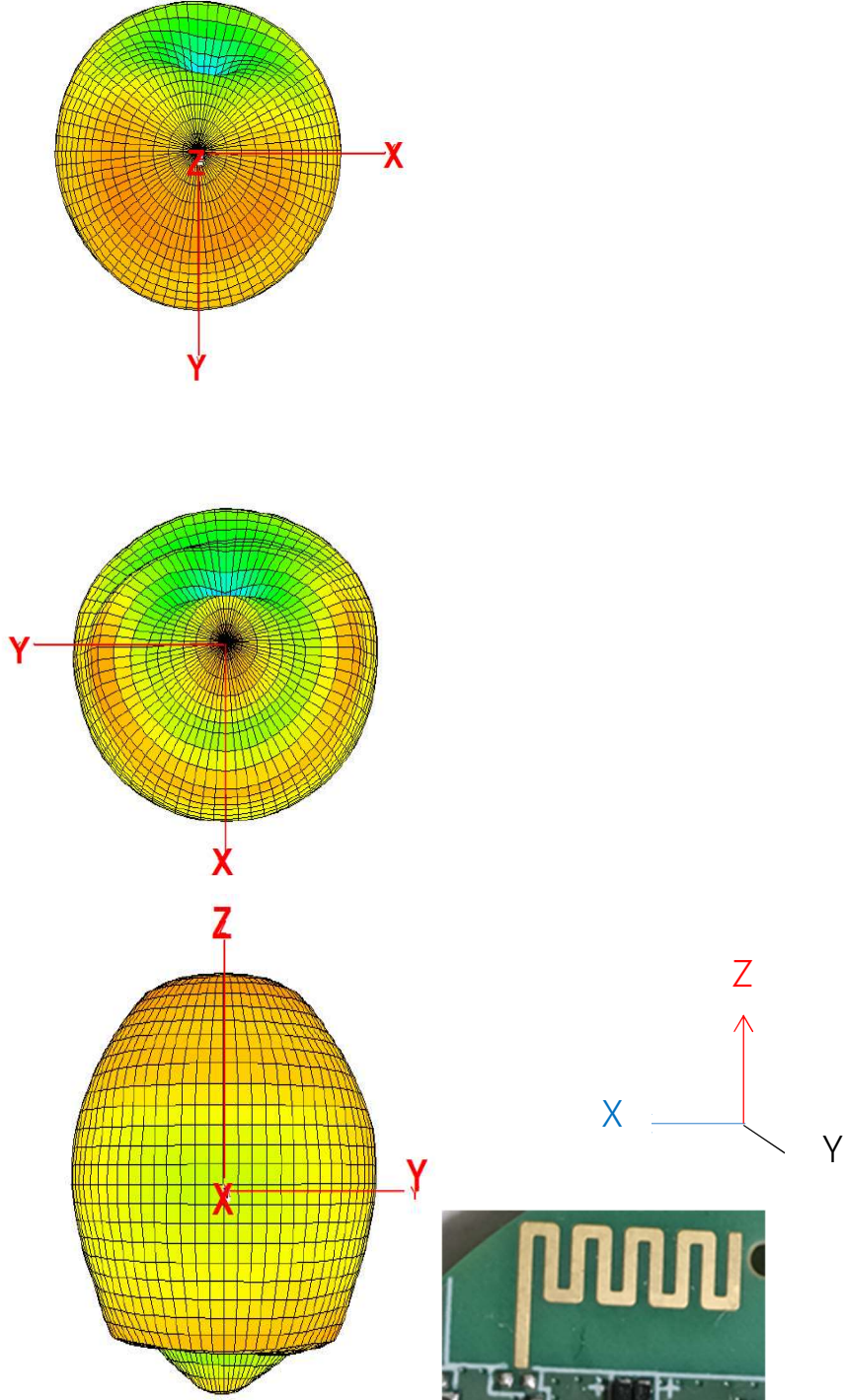
6 Antenna Dimensions

6.1 Antenna Dimensions



7 Radiation Pattern

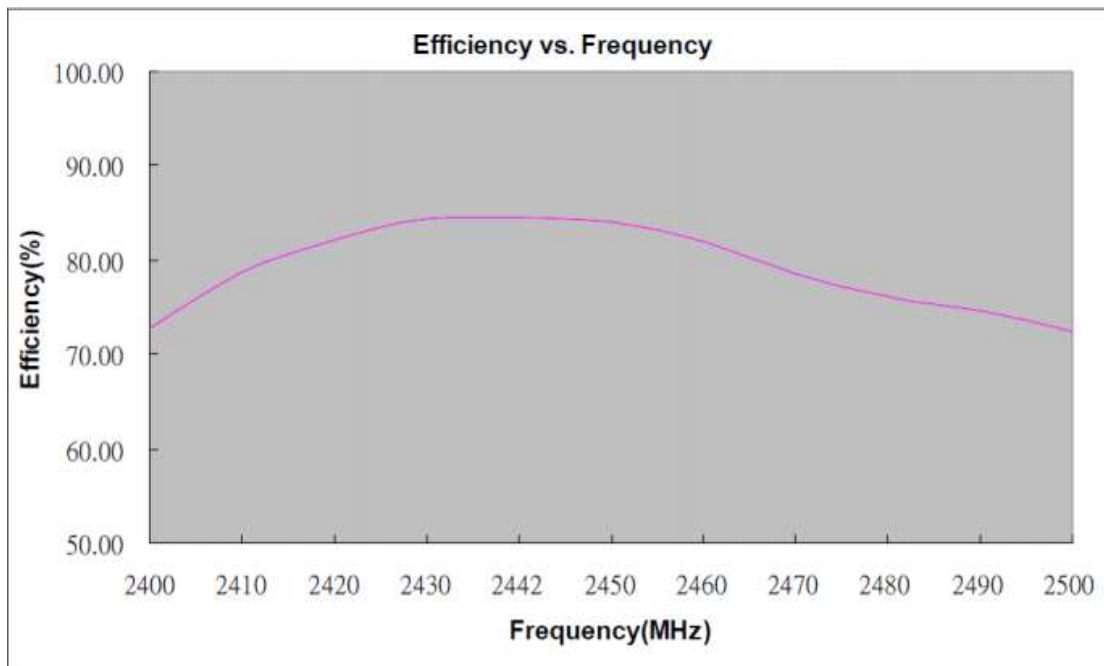
7.1 3D Gain Pattern at (2442MHz)



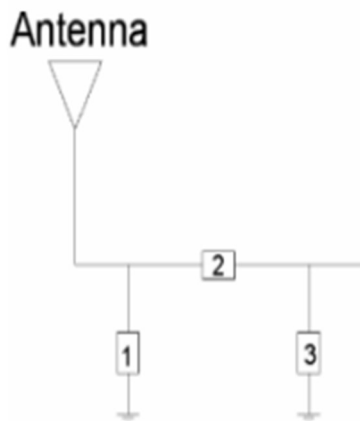
7.2 Efficiency Table

Frequency (MHz)	2400	2410	2420	2430	2442	2450	2460	2470	2480	2490	2500
Efficiency (dB)	-1.38	-1.04	-0.85	-0.74	-0.73	-0.76	-0.86	-1.05	-1.18	-1.27	-1.40
Efficiency (%)	72.83	78.71	82.27	84.39	84.53	84.04	82.00	78.60	76.14	74.64	72.50
Gain (dBi)	0.55	0.6	0.71	0.82	0.95	0.95	0.8	0.69	0.65	0.63	0.59

7.3 Efficiency vs. Frequency

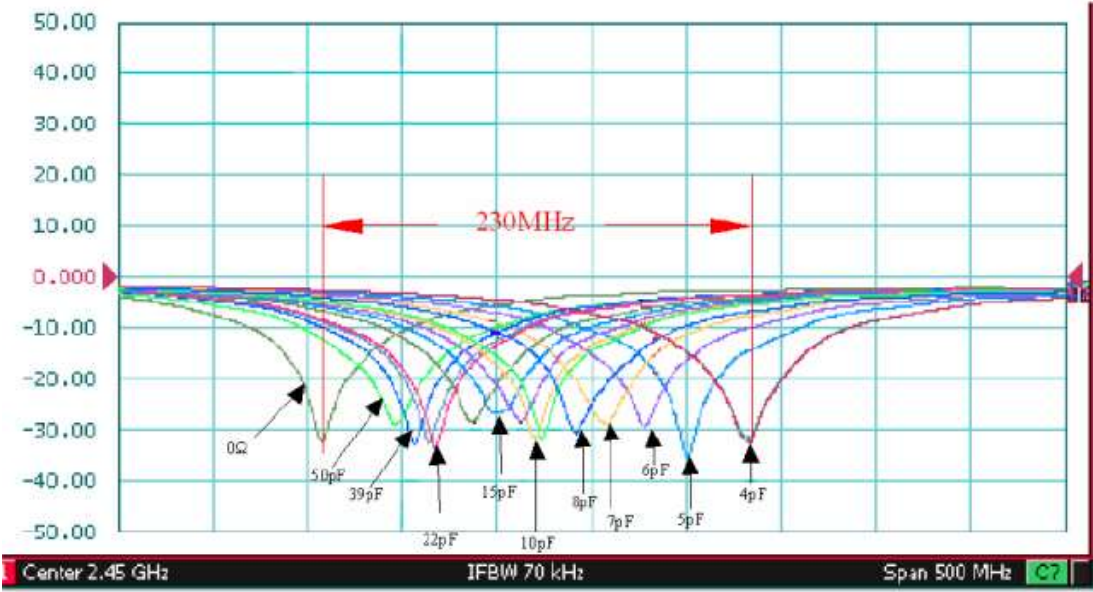


8 Matching Circuit



System Matching Circuit Component		
Location	Description	Vendor
1	N/A	-
2	2.2uH	(0402)
3	0.7PF	0402

9 Fine Tuning Element vs. Center Frequency



10 Storage Conditions

- 1. Temperature: -25 to 85;
- 2. Relative Humidity: 20% to 70%.