fractus
Optimised Antennas for Wireless Devices

DATA SHEET · PRODUCTS & SERVICES

Chip Antenna for Bluetooth®,Zigbee®, 802.11 b/g/n WLAN

Fractus specialises in enabling effective mobile communications. Using Fractus technology, we design and manufacture optimised antennas to make your wireless devices more competitive. Our mission is to help our clients develop innovative products and accelerate their time to market through our expertise in antenna design, testing and manufacturing.

Reach Xtend™ Chip Antenna

P/N: FR05-S1-N-0-001

The Fractus Reach Xtend Bluetooth® & 802.11 b/g/n WLAN Chip Antenna is engineered specifically for devices operating at 2.4 GHz where high performance and low-cost are mandatory.

Taking advantage of the space-filling properties, this small planar monopole antenna is ideal for use within indoor (highly scattered) environments. The Fractus Reach Xtend Bluetooth® & 802.11b /g WLAN Chip Antenna speeds your time to market by allowing you to integrate it within your industrial design easily and efficiently.

6.7 mm x 6.7 mm x 1.0 mm (image larger than real size)

TOP   BOTTOM

PAT US 7,148,850, US 7,202,822

Product Benefits

■ **High efficiency**

Increases your device's range and lengthens battery life.

■ **Omnidirectional pattern**

Optimizes device usage due to a uniform radiation pattern.

■ **Small Volume**

Allows integration into space limited areas easily and efficiently.

■ **Multi-mode support**

Works for Bluetooth, and Wi-Fi 802.11 b/g/n standards.

VSWR and Total Efficiency (%) vs. Frequency (GHz)
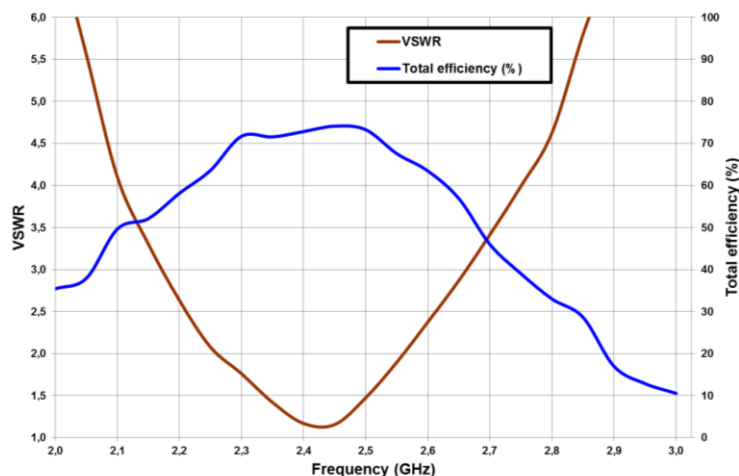
Technical Features	
Frequency range	2.4 GHz - 2.5 GHz
Average Efficiency	74.0 %
Peak Gain	1.3 dB
Radiation Pattern	Omnidirectional
VSWR	< 2:1
Polarization	Linear
Weight (approx.)	0.1 g
Temperature	-40ºC to +85ºC
Impedance	50Ω
Dimensions (L x W x H)	6.7 mm x 6.7 mm x 0.8 mm

Measures from the evaluation board (48.0 mm x 23.0 mm x 1.0 mm PCB)

For additional information, please download the user manual from http://www.fractus.com/index.php/fractus/documentation or contact info@fractus.com.