

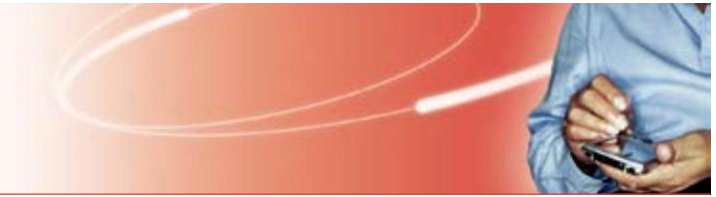


# fractus

Optimised Antennas  
for Wireless Devices

DATA SHEET · PRODUCTS & SERVICES

## Small chip antenna for handset, headset, PDAs and USB-dongles



Fractus specialises in enabling effective mobile communications. Using fractal 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.

### Fractus® Reach Xtend™ Chip Antenna

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

The Fractus Reach Xtend Bluetooth® & 802.11b/g 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 of fractals, 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.

### 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 802.11b and g standards.

**6.7 mm x 6.7 mm x 1 mm** (image larger than real size)



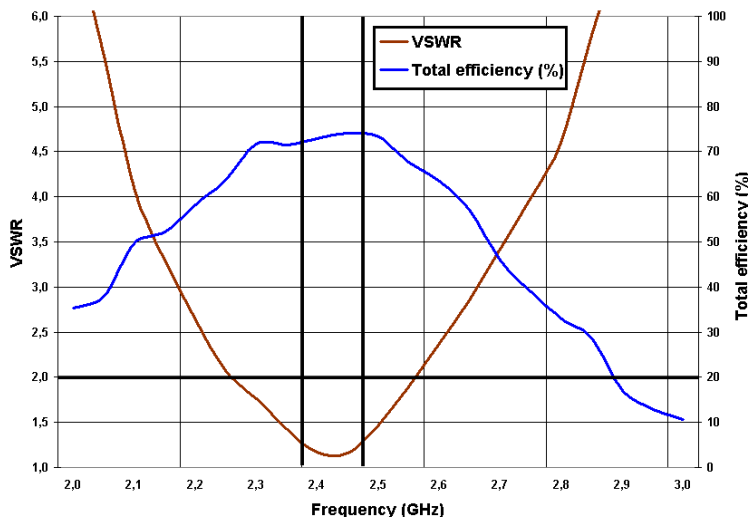
TOP



BOTTOM



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



Technical Features	
Frequency range	2.4 GHz - 2.5 GHz
Average Efficiency	74 %
Peak Gain	1.35 dB
Radiation Pattern	Omnidirectional
VSWR	< 2:1
Polarization	Linear
Weight (aprox.)	0.1 g
Temperature	-40°C to +85°C
Impedance	50Ω
Dimensions (L x W x H)	6.7 mm x 6.7 mm x 1 mm

Measures from the evaluation board (48 mm x 23 mm x 1 mm PCB)

For additional information, please download the user manual from <http://www.fractus.com/main/fractus/documentation> or contact [info@fractus.com](mailto:info@fractus.com).