



fractus

Optimised Antennas
for Wireless Devices

DATA SHEET · PRODUCTS & SERVICES

Small SMD chip antenna for headset, compact flash, secure digital and small PCB devices



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.

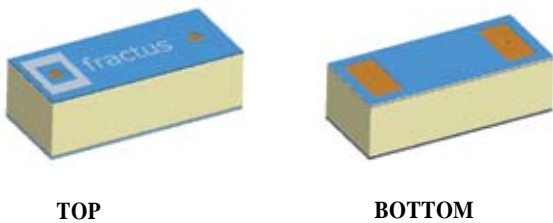
Fractus® Compact Reach Xtend™ Chip Antenna

P/N: FR05-S1-N-0-102

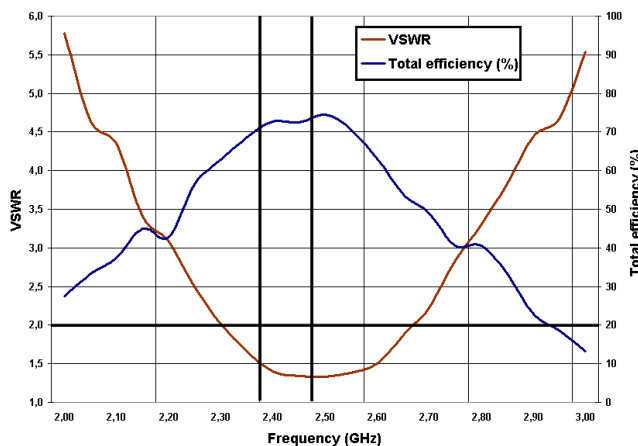
The Fractus Compact Reach Xtend Chip Antenna for Bluetooth® and 802.11 b/g WLAN is a tiny rectangular 3D-shaped antenna suitable for headset, compact flash (CF), secure digital (SD) and other small PCB devices operating at 2.4 GHz where high performance and low-cost are mandatory. Its broad bandwidth ensures high quality signal reception and transmission across wireless devices and different plastic housing designs.

Taking advantage of the space-filling properties of fractals, this small monopole antenna is ideal for use within indoor (highly scattered) environments. The Fractus Compact Reach Xtend Chip Antenna speeds your time to market by allowing you to easily integrate it within your industrial design (SMD mounting).

7 mm x 3 mm x 2 mm (image larger than real size)



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



Product Benefits

- **Small form factor**
Allows integration into space limited areas easily and efficiently with minimum clearance area.
- **Broad bandwidth**
Ensures robust performance when considering different plastic housing and close body proximity.
- **Omnidirectional pattern**
Optimises device usage due to a uniform radiation pattern.
- **Multi-mode support**
Works for Bluetooth, and Wi-Fi 802.11b and g standards.

Technical Features	
Frequency range	2.4 GHz - 2.5 GHz
Average Efficiency	72 %
Radiation Pattern	Omnidirectional
Peak Gain	1.7 dB
VSWR	< 2:1
Weight (aprox.)	0.1 g
Impedance	50 Ω
Dimensions (L x W x H)	7 mm x 3 mm x 2 mm

Measures from the evaluation board (47 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.