



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.

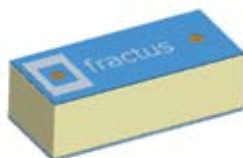
Compact Reach Xtend™ Chip Antenna

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

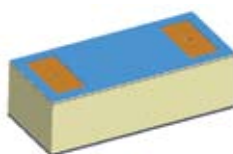
The Fractus Compact Reach Xtend Chip Antenna for Bluetooth® and 802.11 b/g WLAN is a tiny rectangular 3D-shaped antenna suitable for headset, compact flash (CF), secure digital (SD) and other small PCB devices operating at 2.4 GHz where high performance and low-cost are mandatory. Its broad bandwidth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

Taking advantage of the space-filling properties, this small mono-pole 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).

7.0 mm x 3.0 mm x 2.0 mm (image larger than real size)



TOP



BOTTOM

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.

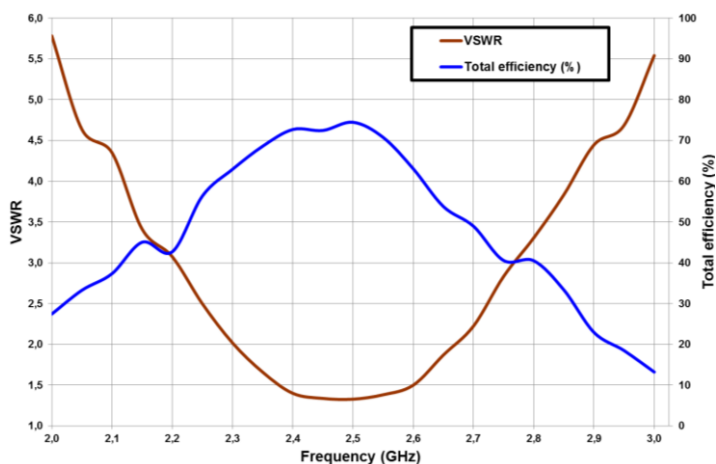
■ Omnidirectional pattern

Optimises device usage due to a uniform radiation pattern.

■ Multi-mode support

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

VSWR and Total Efficiency (%) vs. Frequency (GHz)



Technical Features	
Frequency range	2.4 GHz - 2.5 GHz
Average Efficiency	72.0 %
Radiation Pattern	Omnidirectional
Peak Gain	1.7 dB
VSWR	< 2:1
Weight (approx.)	0.1 g
Impedance	50 Ω
Dimensions (L x W x H)	7.0 mm x 3.0 mm x 2.0 mm

Measures from the evaluation board (47.0 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.