



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.

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

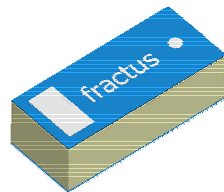
Fractus® Compact Reach Xtend™ Chip Antenna

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

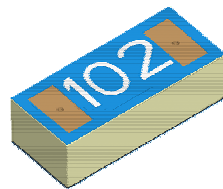
The **Fractus® Compact Reach Xtend™ chip antenna** for Bluetooth® and 802.11 b/g WLAN is a tiny rectangular 3D-shaped antenna suitable for headset, compact flash (CF), secure digital (SD) and other small PCB devices operating at 2.4 GHz where high performance and low-cost are mandatory. Its broad bandwidth 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).

Bluetooth® / 802.11 b/g



Front view



Bottom view

7 x 3 x 2 mm

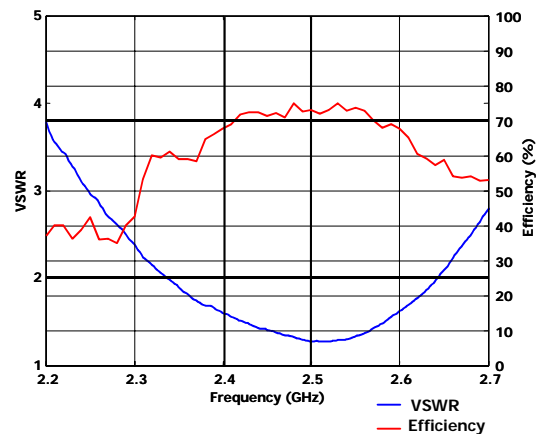
Frequency range	2400-2500 MHz
Efficiency	> 70 %
Peak Gain	> 1 dBi
VSWR	< 2:1
Weight	0.20 g
Temperature	-40 to + 85 °C
Impedance	50 Ω Unbalanced
Dimensions	7 x 3 x 2 mm

Patent Pending: WO0154225, WO0122528, PCT/EP01/10589, PCT/EP02/07837, US60/613394, US60/627653 and PCT/EP02/07836 ©FRACTUS S.A. 2005

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.

Measured results from a standard PCB of 47x23 mm



Please, contact your sales representative at Richardson Electronics to get additional information on recommended configurations for different devices:

RICHARDSON ELECTRONICS www.rell.com/loc_results.asp?COUNTRY=&FLAG=2
FRACTUS wireless@fractus.com

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