



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.

Slim Reach Xtend™ Bluetooth® Chip Antenna

P/N: FR05-S1-N-0-104

The Fractus Slim Reach Xtend Bluetooth Chip Antenna for wireless headsets is a tiny rectangular 3D-shaped antenna suitable for small headset devices operating at 2.4 GHz where high performance, low-cost and reduced form factor are mandatory. Its broad bandwidth ensures high quality signal reception and transmission across wireless devices and different plastic housing regardless of how a user positions the device.

Taking advantage of the space-filling properties, this small monopole antenna is ideal for use within indoor (highly scattered) environments. The Fractus Slim 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 0.9 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.

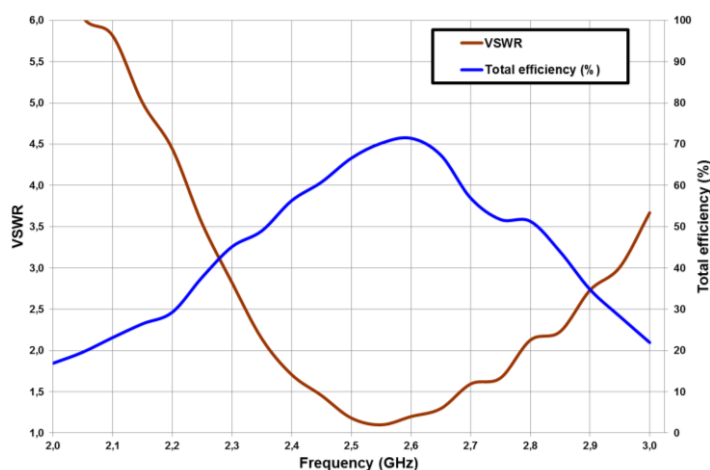
■ High performance

Increases signal quality and device range due to a superior radiation efficiency.

■ Omnidirectional pattern

Optimises device usage due to a uniform radiation pattern.

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



Technical Features	
Frequency range	2.4 GHz – 2.5 GHz
Average Efficiency	61.0 %
Peak Gain	1.1 dB
Radiation Pattern	Omnidirectional
VSWR	< 2:1
Polarization	Linear
Weight (approx.)	0.04 g
Temperature	-40 to + 85°C
Impedance	50 Ω
Dimensions (L x W x H)	7.0 mm x 3.0 mm x 0.9 mm

Measures from the evaluation board (40.0 mm x 20.0 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.