

# Micro Reach Xtend™ (NN01-110)

Bluetooth®, Zigbee®, 802.11 b/g/n WLAN (2.4 – 2.5 GHz)

Fractus Antennas specializes in enabling effective mobile communications. Using Fractus Antennas technology, we design and manufacture optimized 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.

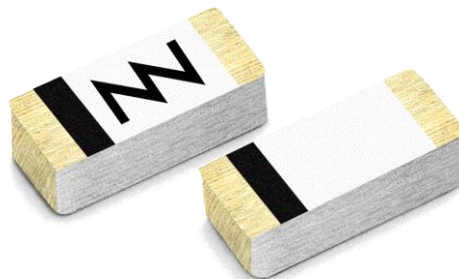
## Product Benefits

The Micro Reach Xtend™ chip antenna is a very small size and low cost antenna that combines reduced clearance area required within the customer PCB with its high performance and integration flexibility. The Micro Reach Xtend™ antenna is built on glass epoxy substrate. This makes it ideal for small consumer electronics devices such as small wireless headsets and highly integrated multifunction mobile handsets.

Taking advantage of the space-filling properties, this small monopole antenna is perfect to use within indoor (highly scattered) environment.

- **Small form factor**  
Allows integration into space limited areas easily and efficiently with minimum clearance area.
- **Low cost**  
Enables product developers to reduce BoM cost increasing device competitiveness.
- **Omnidirectional pattern**  
Optimizes device usage due to a uniform radiation pattern.
- **Broad bandwidth**  
Ensures robust performance when considering different plastic housing and close body proximity.

4.1 mm x 2.0 mm x 1.0 mm (image larger than real size)

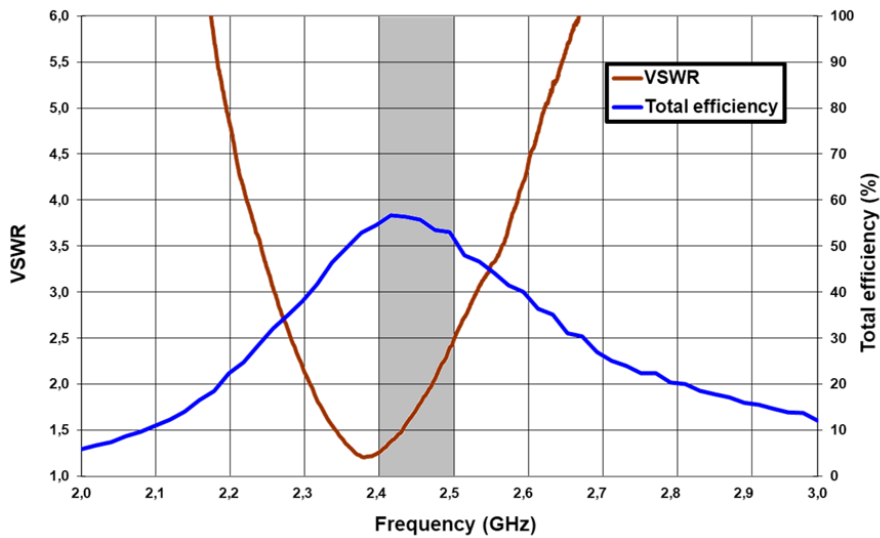


PAT US 7,148,850, US 7,202,822

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



Technical Features	
Frequency range	2.4 GHz – 2.5 GHz
Average Efficiency	> 55 %
Peak Gain	0.2 dBi
Radiation Pattern	Omnidirectional
VSWR	< 2.5:1
Polarization	Linear
Weight (approx.)	0.02 g
Temperature	-40 to + 125° C
Impedance	50 Ω
Dimensions (L x W x H)	4.1 mm x 2.0 mm x 1.0 mm

Measures from the evaluation board (40.0 mm x 20.0 mm x 1.0 mm)

See pictures of the evaluation boards, matching network configuration and graphs of the specs in the [user manual](#).

For additional information, please visit [www.fractusantennas.com](http://www.fractusantennas.com) or contact [info@fractusantennas.com](mailto:info@fractusantennas.com).

If you need assistance to design your matching network, please contact [support@fractusantennas.com](mailto:support@fractusantennas.com), or try our free-of-charge **NN Wireless Fast-Track** design service, you will get your chip antenna design including a custom matching network for your device in 24h<sup>1</sup>. Other related to NN's range of R&D services is available at: <https://www.fractusantennas.com/rdservices/>

<sup>1</sup> See terms and conditions for a free NN Wireless Fast-Track service at: <https://www.fractusantennas.com/fast-track-project/>