



# fractus

Optimised Antennas  
for Wireless Devices



DATA SHEET · PRODUCTS & SERVICES

## Off-the-shelf internal antenna for FM band applications



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® FracFM™ Antenna

P/N: FR01-B3-W-0-055

The Fractus FracFM™ is an off-the-shelf internal antenna solution specifically designed for general handheld devices and applications operating in the FM band.

FracFM minimises your product development cost and time. It combines small size and high performance making FracFM an optimal choice for your portable FM application.

Its electrical and mechanical characteristics ensure design flexibility and optimal performance in devices such as: PDAs, Ultra Mobile PC, Personal Media Player, Private Mobile Radio, and Laptops.

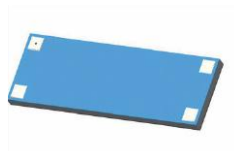
### Product Benefits

- Reduced Form Factor
- Modularity - SMD
- Superior Performance
- Passive Solution  
(no amplifier, no active tuning)

32 mm x 11 mm x 1.6 mm (image larger than actual size)



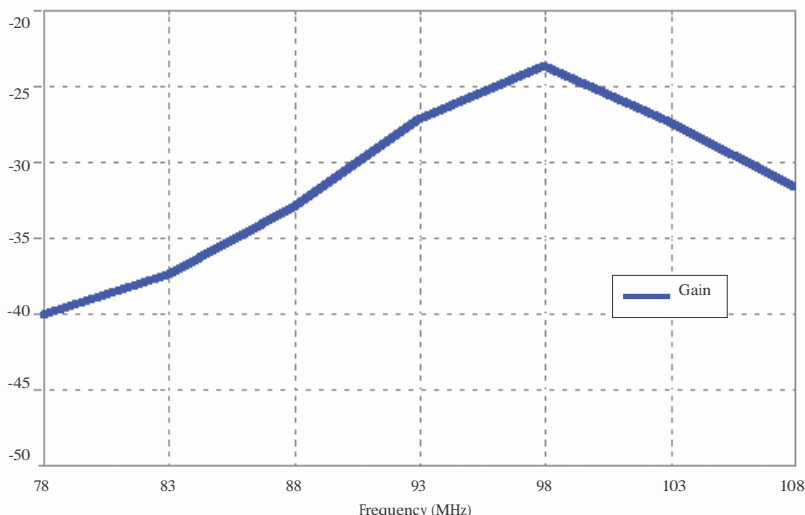
TOP



BOTTOM

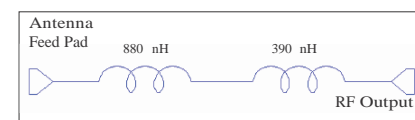
PAT. US 7,148,850, US 7,202,822

### FracFM™ Gain Performance



Technical Features	
Frequency Range	78-108 MHz
Gain Curve	See graph
Radiation Pattern	Omnidirectional
Flatness	< 2 dB gain variation
Weight (approx.)	1.1 g
Temperature	-40 to 85° C
Impedance	50 Ω
Dimensions (L x W x H)	32.0 mm x 11.0 mm x 1.6 mm

Measures from the evaluation board (128.0 mm x 60.0 mm x 1.0 mm PCB) with 2 elements matching network



Optimal matching network values may vary depending on the antenna environment.

For additional information, please download the user manual from <http://www.fractus.com/index.php/fractus/documentation> or contact [info@fractus.com](mailto:info@fractus.com).