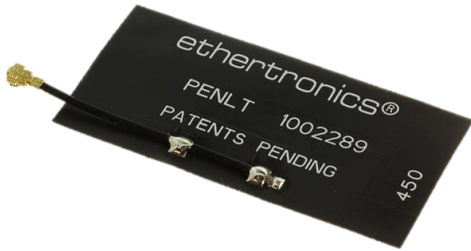


Part No.1002289

Standard Octa-Band Cellular Embedded Antenna

700/750/850/900/1800/1900/2100/2700 MHz



Ethertronics LTE cellular embedded antennas 1002289 address the challenges facing today's product designers. Based on a flexible substrate for easier integration and high performance and isolation characteristics to offer better connectivity, the 1002289 supports all the worldwide cellular bands for LTE with backwards compatible.

Stays in Tune

Ethertronics antenna technology provides superior RF field containment, resulting in less interaction with surrounding components. Ethertronics antennas providing a robust radio link regardless of the usage position.

LTE Embedded Antennas based on Flexible PCB

Cellular LTE

KEY BENEFITS

Reduced Costs and Time-to-Market

Standard antenna eliminates design fees and cycle time associated with a custom solution; getting products to market faster.

Greater Flexibility with Unique Form Factors

Ethertronics' technology helps you deliver more advanced ergonomic designs without adverse impact on product performance.

RoHS Compliant

Ethertronics' antennas are fully compliant with the European RoHS Directive 2002/95/EC.

APPLICATIONS

- M2M
- Automotive
- Healthcare
- Point of Sale
- Smart Metering

Electrical Specifications

Typical Characteristics, on 75x140mm ground plane, Antenna is mounted directly on plastic material

	700 - 960 MHz	1710 - 2700 MHz
Average Efficiency (Longer Edge)	74 %	58 %
Average Efficiency (Shorter Edge)	67 %	63 %
VSWR Match	2.5:1 max	
Feed Point Impedance	50 ohms unbalanced	
Polarization	Linear	
Power Handling	2 Watts CW	
Radiation Pattern	Omni-directional	

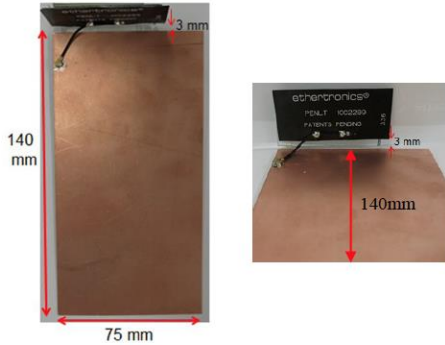
Mechanical Specifications

Maximum Dimensions	53.6x25.1x1.25 mm (1.25mm high at cable solder connection)
Cable / Connector	U.fl compatible connector Cable diameter, 1.13mm, 25mm Cable length
Mounting	using 3M468 Adhesive

Cellular / LTE Band Ethertronics' Embedded Antenna Specifications.
 Ethertronics produces a wide variety of standard and custom antennas to meet user needs.
 Below are the typical performances.

Antenna Location 1

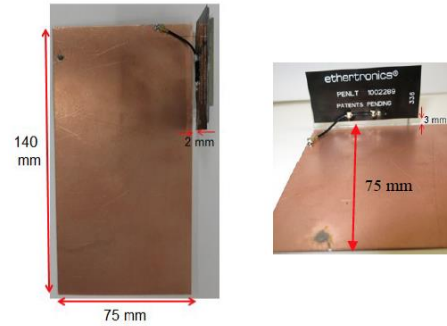
Antenna located at the end of the long edge of the PCB



In this position, the antenna is located 3mm away from the PCB and 3mm above the PCB

Antenna Location 2

Antenna located at the end of the short edge of the PCB.

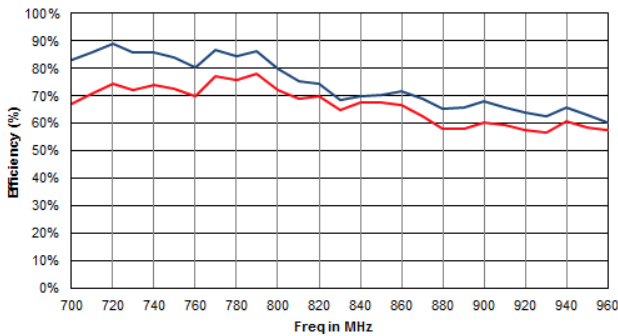


In this position, the antenna is located 2mm away from the PCB and 3mm above the PCB

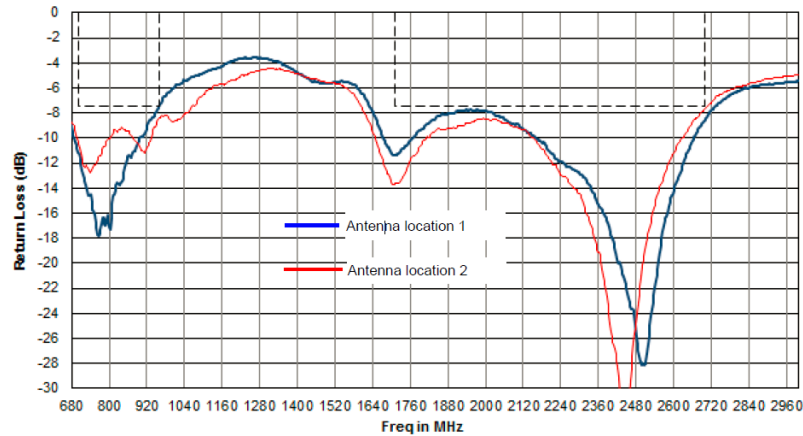
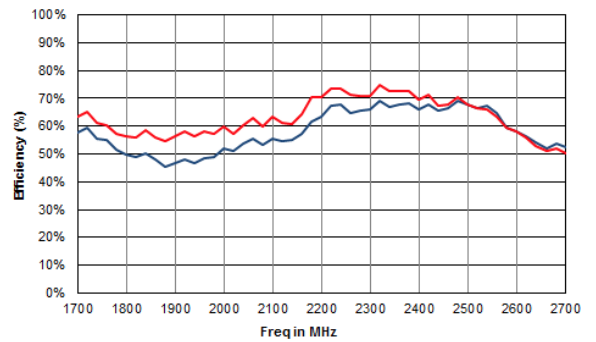
Typical Efficiency and Return Loss Plots

Antenna mounted directly on PC + ABS housing material

Low Band - 700-960MHz



High Band - 1700-2700MHz

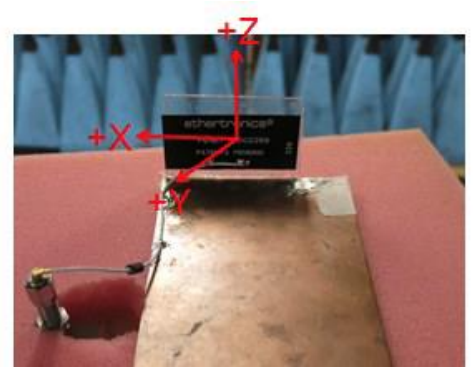
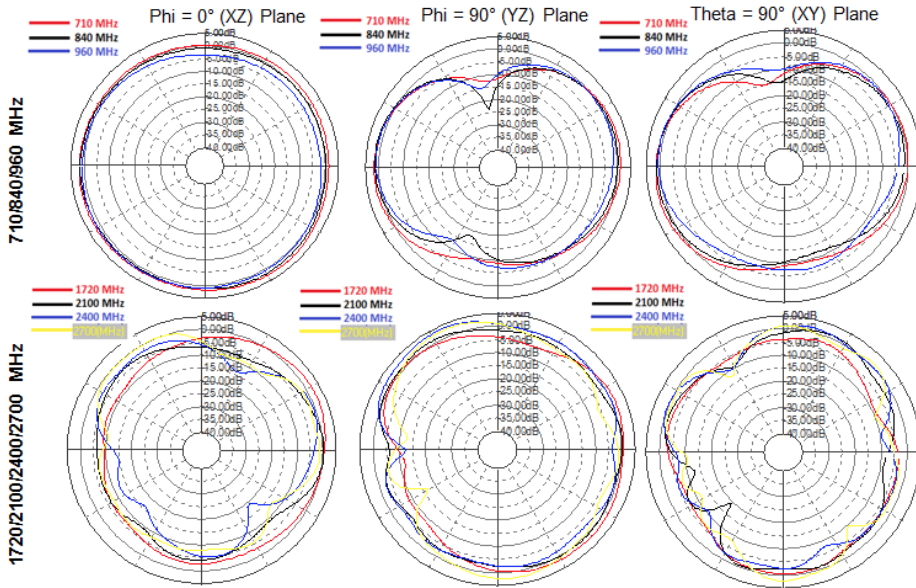


*All dimensions provided in this document are for informational purposes only.

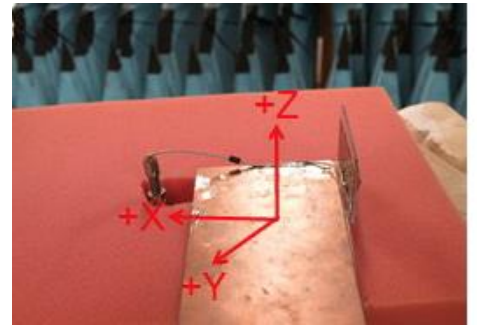
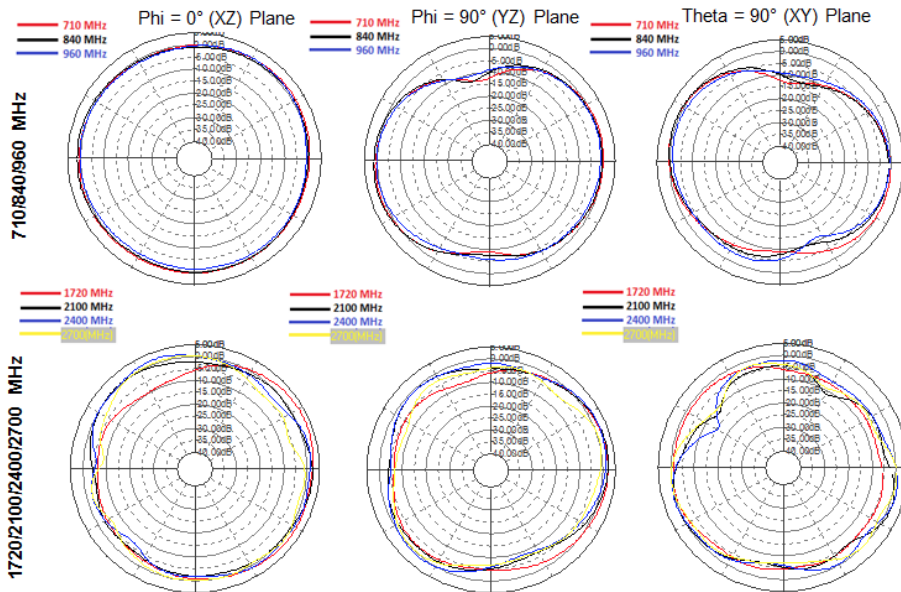
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 Below are the typical performances.

Typical Radiation Patterns

Antenna Location 1



Antenna Location 2



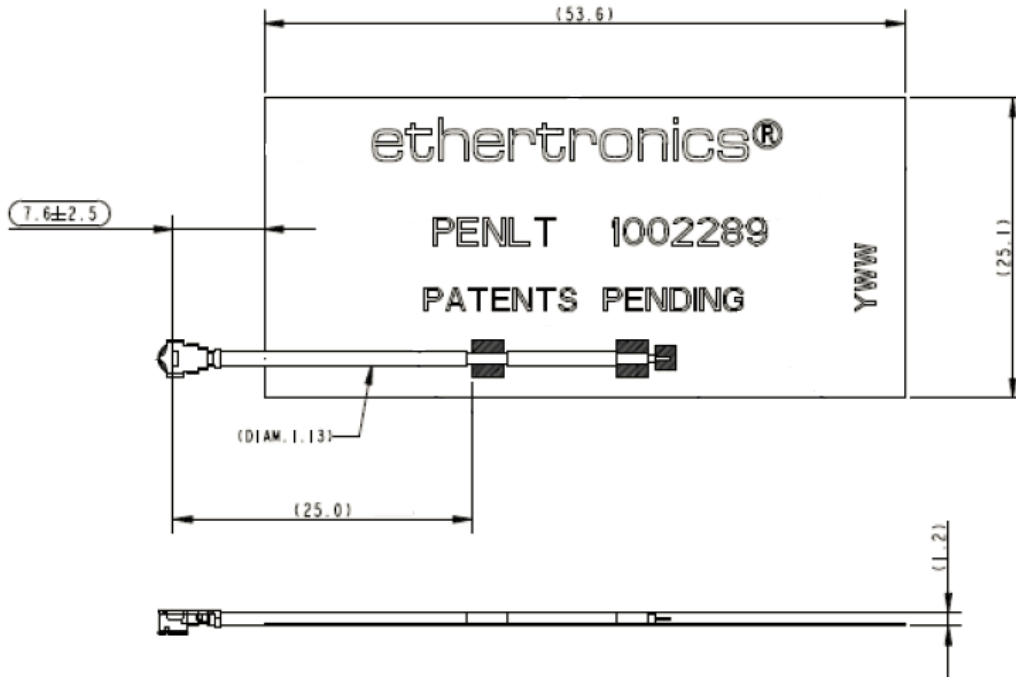
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Cellular / LTE Band Ethertronics' Embedded Antenna Specifications.
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Below are the typical performances.

Mechanical Dimensions

Dimensions for reference only, in mm



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