



# ULTRA-WIDE BAND (UWB) CERAMIC CHIP ANTENNAS

TE Connectivity (TE) ultra-wide band (UWB) ceramic chip antennas can transmit large amounts of data over a wide frequency spectrum. UWB antennas provide a powerful solution in a small package for low and high band UWB channels 1 to 11 (3500 MHz-8500 MHz). Providing secure and reliable communication (up to 50x faster than GPS). TE's UWB antennas combine accuracy, affordability, and ease of deployment in one of the smallest form factors available in the market to offer a low total cost of ownership and wider coverage than most similar products in the market.

UWB ceramic chip antennas allow for secure communications with a signal that is more difficult to detect and intercept than other signal transmission methods. UWB signals can facilitate centimeter-level positioning, with the ability to locate objects to/within 10cm.

UWB ceramic chip antennas are an integral component in modern wireless communication systems, offering several advantages over traditional narrow band antennas. UWB technology is being adopted widely and showing significant growth in short-range wireless applications.

# **PRODUCT FACTS**

- Two part numbers covering 3500 MHz-8500 MHz and 6000 MHz-8000 MHz
- Operates in channels 1 through 11
- More accurate distance estimation with centimeter resolution
- Low power, high efficiency
- Small form factor
- Can be mounted directly onto a PCB via standard surface mount technology
- Can replace multiple narrow band antennas and potentially reduce interference
- RoHS 2.0 compliant
- AEC-Q200 compliant

# **APPLICATIONS**

- Indoor positioning and localization
- Asset tracking
- Contact tracing
- Vehicle to everything (V2X) communications
- Smart home / Home automation
  - Access control
  - Remote controls
  - Door handles
- Automotive sensors
- Precision surveying
- Factory automation
- Radar / Imaging systemsx
- Wireless data transmission

- High speed data transmission over short distances
- Secure communication

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# PART NUMBERS

Part #	Detailed Description
<u>L000601-01</u>	UWB ceramic chip antenna 6000 MHz – 8000 MHz 6mm x 5mm x 0.5mm
L000601-80	Evaluation board for UWB ceramic chip antenna 6000 MHz - 8000 MHz 6mm x 5mm x 0.5mm
L000801-01	UWB ceramic chip antenna 3500 MHz - 8500 MHz 8mm x 6mm x 0.5mm
<u>L000801-80</u>	Evaluation board for UWB ceramic chip antenna 3500 MHz - 8500 MHz 8mm x 6mm x 0.5mm

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