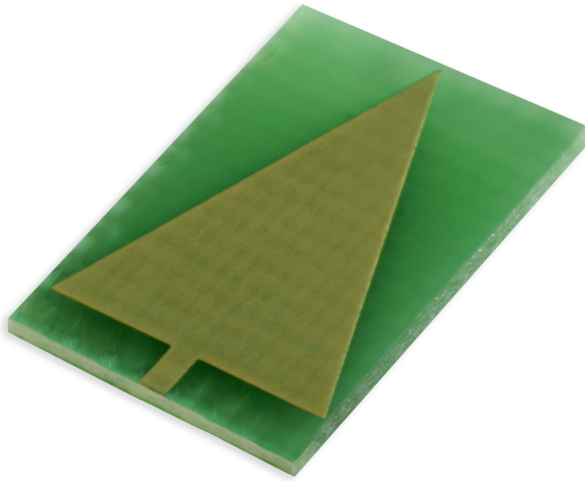


UWB Antenna

Ground cleared under antenna, clearance area 10.0 mm x 8.5 mm. Pulse Part Number: W3541



Features

- Omni directional radiation
- Constant gain across the operation band
- Low profile
- Compact size WxLxH (6.5 x 8.0 x 0.8 mm)
- Low weight 0.082 g
- Lead free materials
- Fully SMD compatible
- Lead free soldering compatible
- RoHS Compliant Product

Applications

- 4.5 – 14.0 GHz

Electrical specifications @ +25 °C

Note: Electrical characteristics depend on test board (GP) size and antenna positioning on GP and Ground Clearance area size.

Typical performance

Typical performance (testboard size 100 x 50 mm, PWB ground clearance area 10.0 mm x 8.5 mm)

Frequency Range [GHz]	Max Gain [dBi]	Efficiency [%] / [dB]	Return loss min. [dB]	Impedance [Ω]	Operating Temperature [°C]
4.5 – 5.9	3.3 (Peak)	70/-1.6 (Average)	-10	50	-40 to +85

Pulse Finland Oy

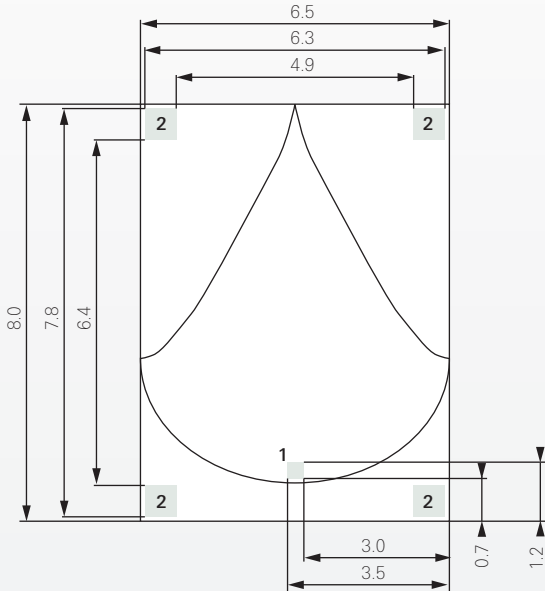
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UWB Antenna

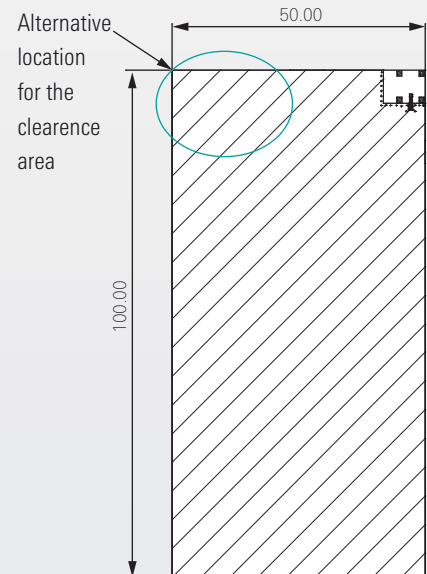
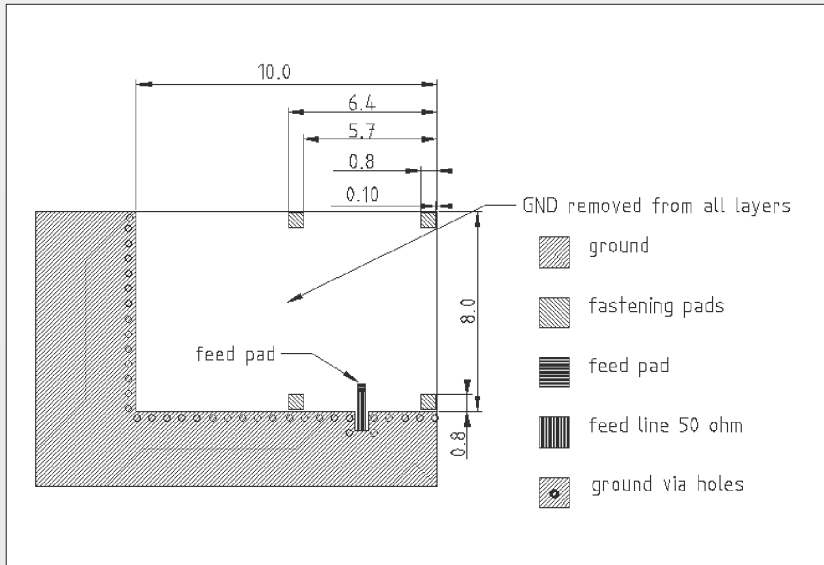
Ground cleared under antenna, clearance area 10.0 mm x 8.5 mm. Pulse Part Number: W3541

Terminal Configuration and antenna dimensions



No.	Pad Name	Pad Dimensions
1	Feed	0.5 x 0.5 mm
2	Fastening pads	0.7 x 0.7 mm

Recommended test board layout for electrical characteristic measurement, test board outline size 100 x 50 mm



- Feed line should be designed to match 50 Ω characteristic impedance, depending on PWB material and thickness.

- Alternatively the clearance area may be located at the left upper corner of the printed wired board

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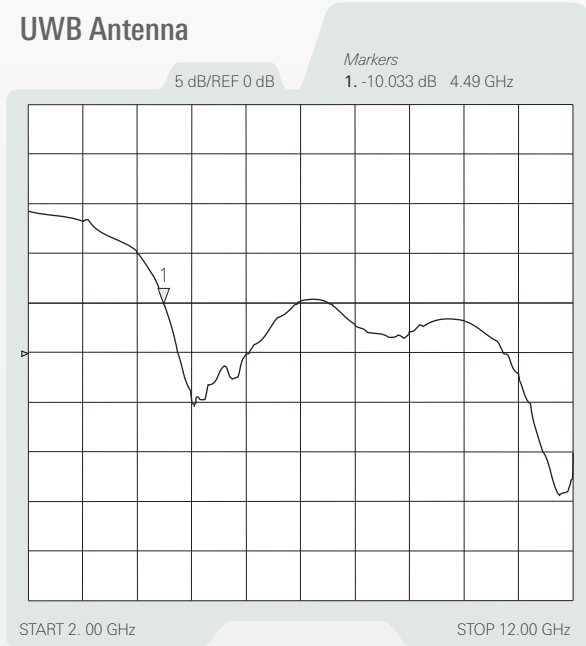


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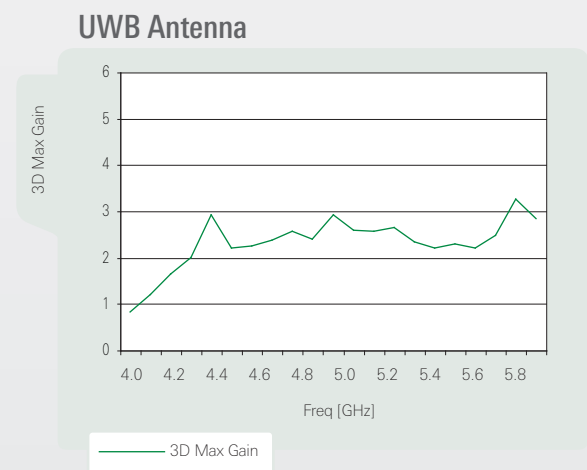
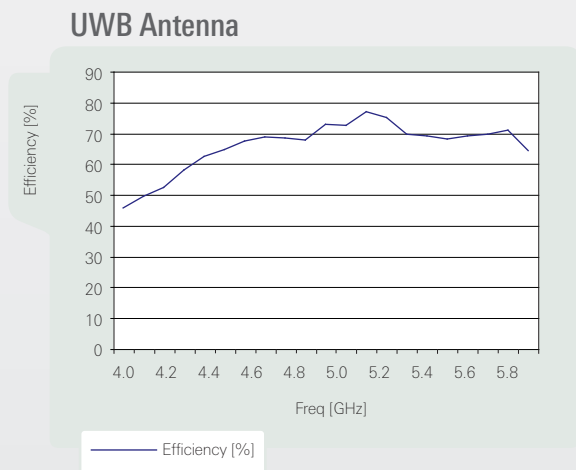
Ground cleared under antenna, clearance area 10.0 mm x 8.5 mm. Pulse Part Number: W3541

Typical Electrical Characteristics (T=25 °C)

Typical Return Loss S11/ impedance, measured on the 100 x 50 mm test board



Free space efficiency and maximum gain



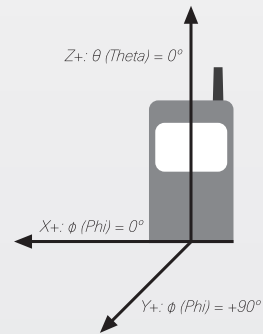
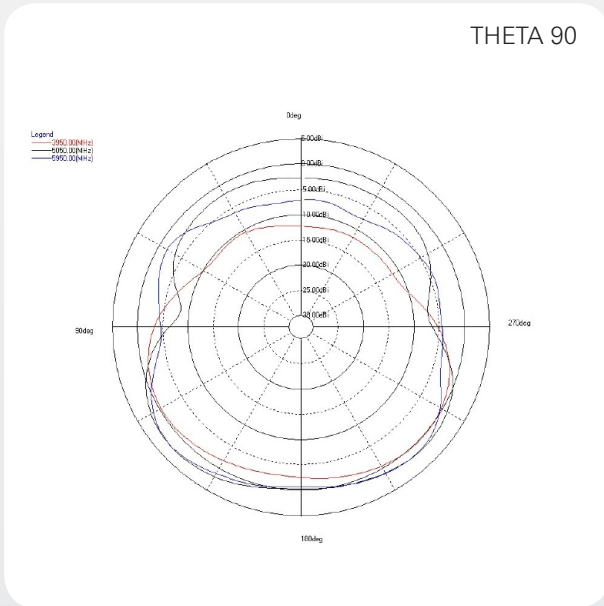
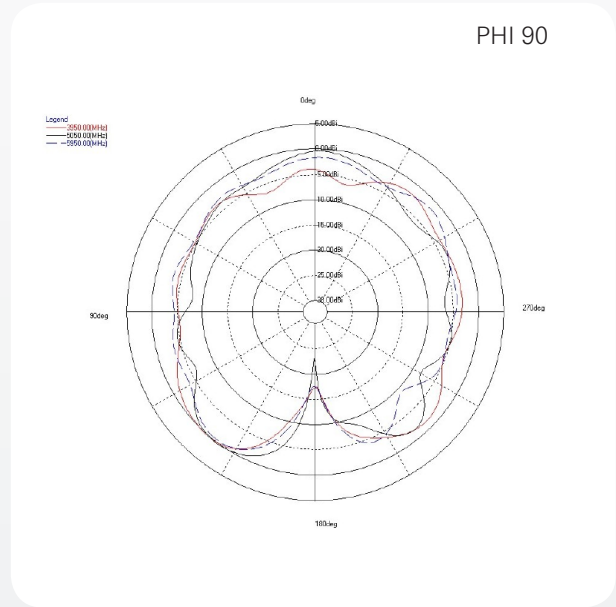
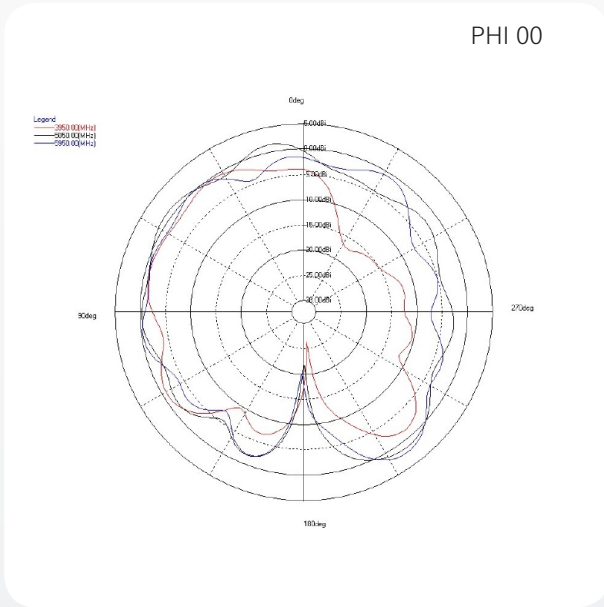
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Typical Free space Radiation Patterns



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