

Datasheet

6.35-8.44GHz Internal Antenna



13.1 X 16.4 X 0.45 mm

PCB Antenna

Features:

This UWB antenna is PCB antenna which can be flexible mounting on non-metal surfaces, supporting 6.35 to 8.44GHz bands with I-PEX MHF 1 connector.

Applications:

- Smart Home
- Agriculture
- Tracking
- Radar
- Automotive
- Healthcare
- Digital Signage
- Telematics



Electrical Specifications

Antenna Characteristics

Antenna Type	Radiation Pattern	Polarization	Max. Input Power	Impedance
PCB Antenna	Omni	Linear	1W	50Ω

Frequency (GHz)	6.35~7.91	7.93~8.44
Return Loss (dB)	< -10	< -10
Peak Gain (dBi)	3.8	3.7
Average Gain (dB)	-1.4	-0.8
Efficiency (%)	72	83

Mechanical Specifications

Environmental

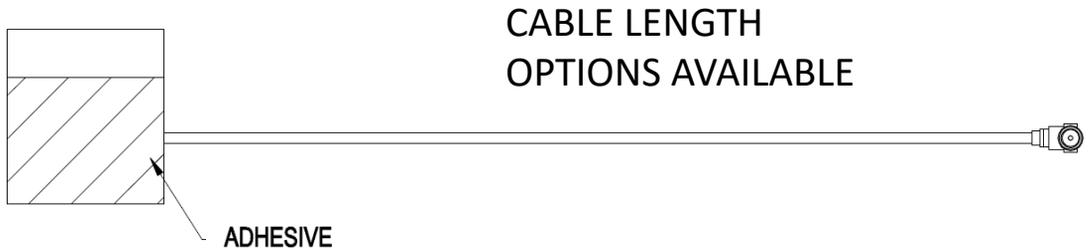
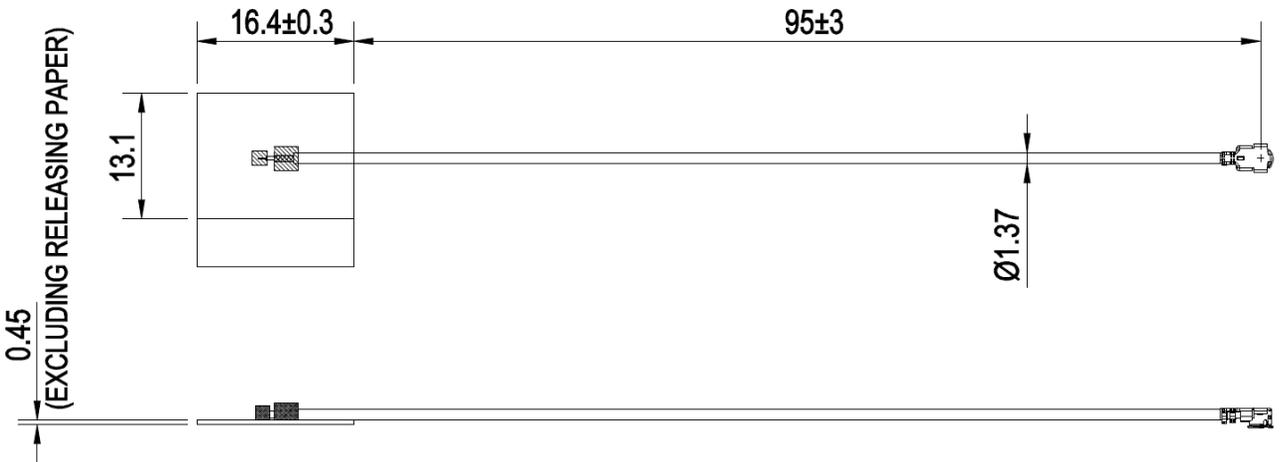
Temperature Range (°C)	-40 to 85
Humidity	Non-condensing 65°C 95% RH

RoHS Compliant

Part Number	Dimension (mm)	Weight (g)	Conn. Type	Cable Type	Material	Adhesive
ST1125-00-401-A	13.1 × 16.4 × 0.45	0.8	I-PEX MHF 1	Ø 1.37	FR-4	3M 467MP

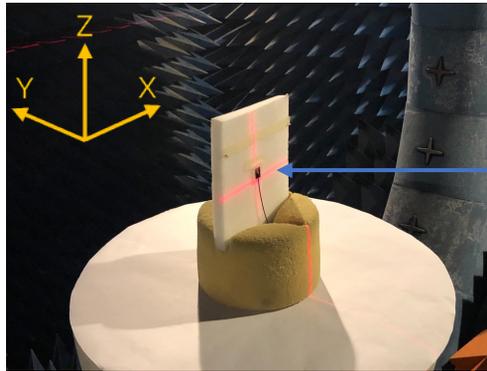
Mechanical Drawing

Unit : mm



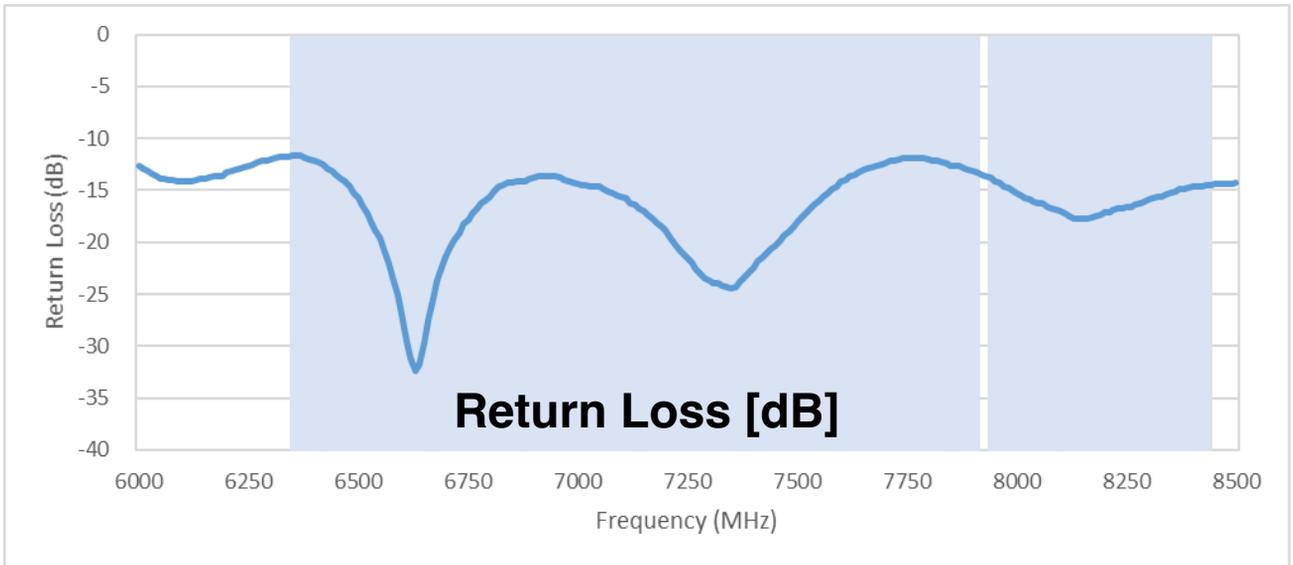
ST1125-00-401-A

Charts In Free Space

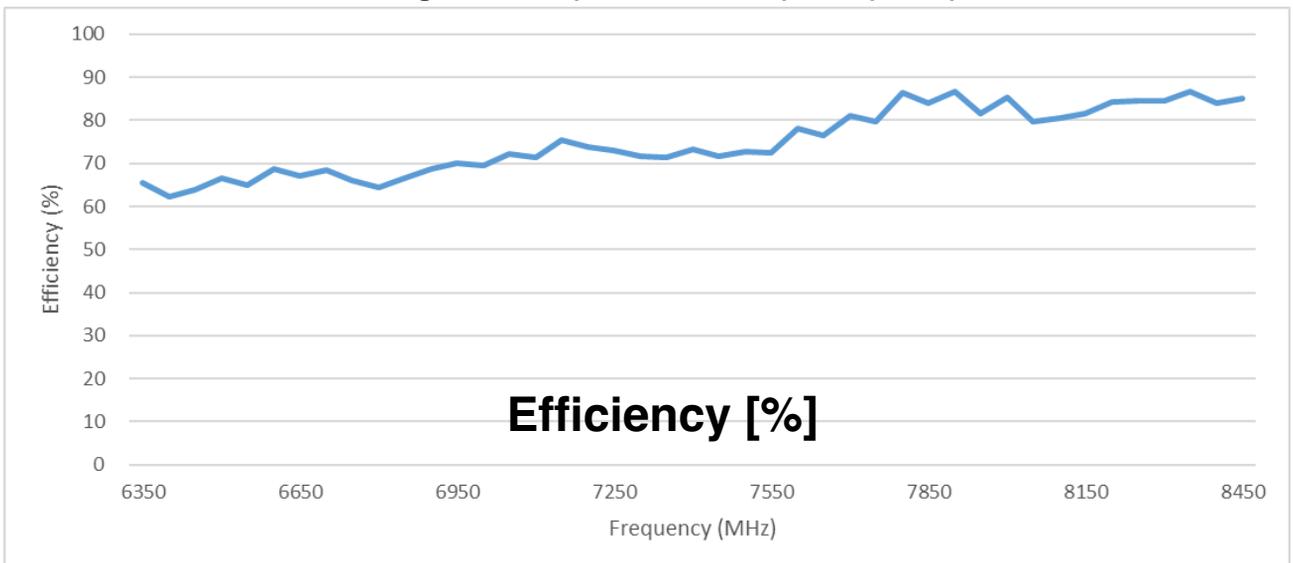


ST1125-00-401-A

Test setup, measurement performed in 3D anechoic chamber.

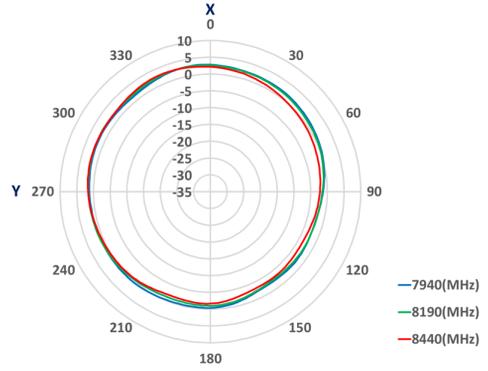
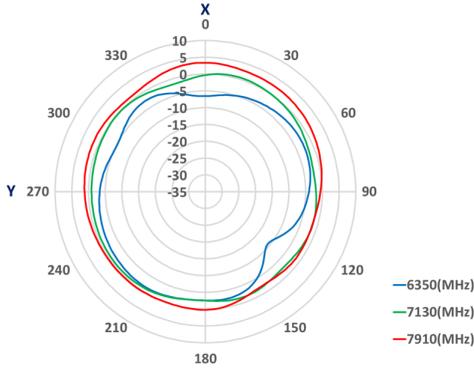


Blue background represents frequency response.

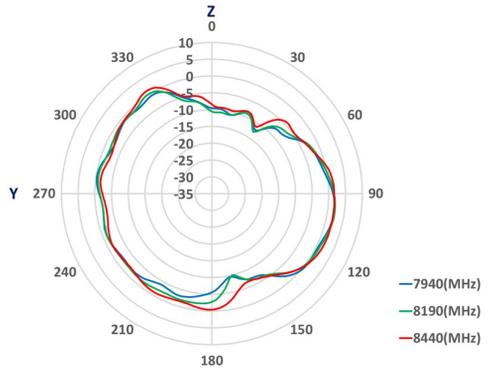
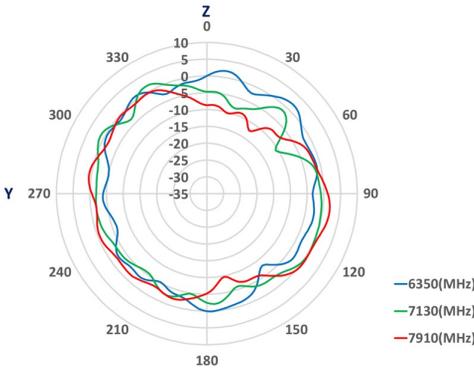


Radiation Pattern - Free Space

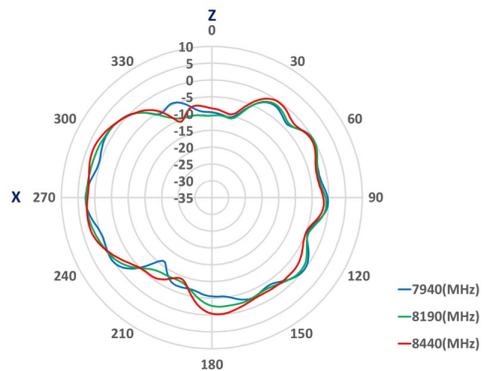
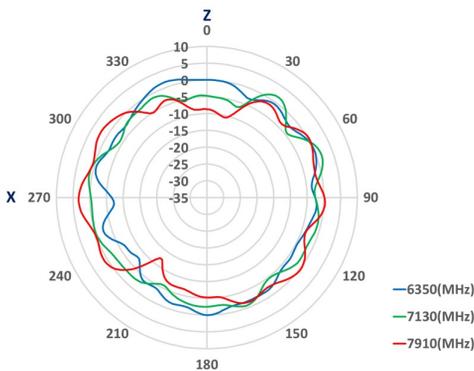
XY - Plane



YZ - Plane



XZ - Plane



Revisions

Rev.	Description	Date	ECN	Approval
A	Initial Release	2022-12-22	ST1125-00-401-A-RA00	ATC

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