

Datasheet

RFID Patch Antenna

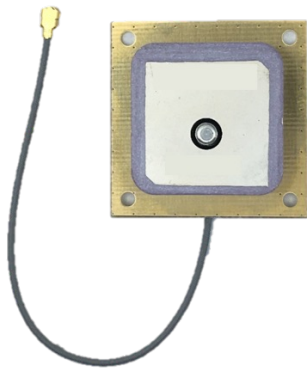
868MHz

Features:

The patch antenna has much higher efficiency and small form factor, easy mounting with I-PEX MHF1, suitable for mounting inside device.

Applications:

- Inventory computing system
- Logistic monitoring system
- Automotive Navigation
- Military & high-security device
- Tracking and Positioning



33.0 × 33.0 × 4.8 mm

Patch Antenna



Electrical Specifications

Antenna Characteristics By Range Of Receiving Frequency

Frequency (MHz)	868 ± 3
Return Loss (dB)	< -15
Gain (dBic) @Zenith	-3.9
Efficiency (%) @Center Frequency	38
Axial Ration (dB)	3 Typ.
Polarization	RHCP
Impedance (Ω)	50

Mechanical Specifications

Mechanical

Ceramic Dimension (mm)	25.1 × 25.1 × 4.0
Total Dimension w/o Cable (mm)	33.0 × 33.0 × 4.8
Connector Type	I-PEX MHF 1
Cable Type	Coaxial Cable Ø 1.13
Weight (g)	15.6

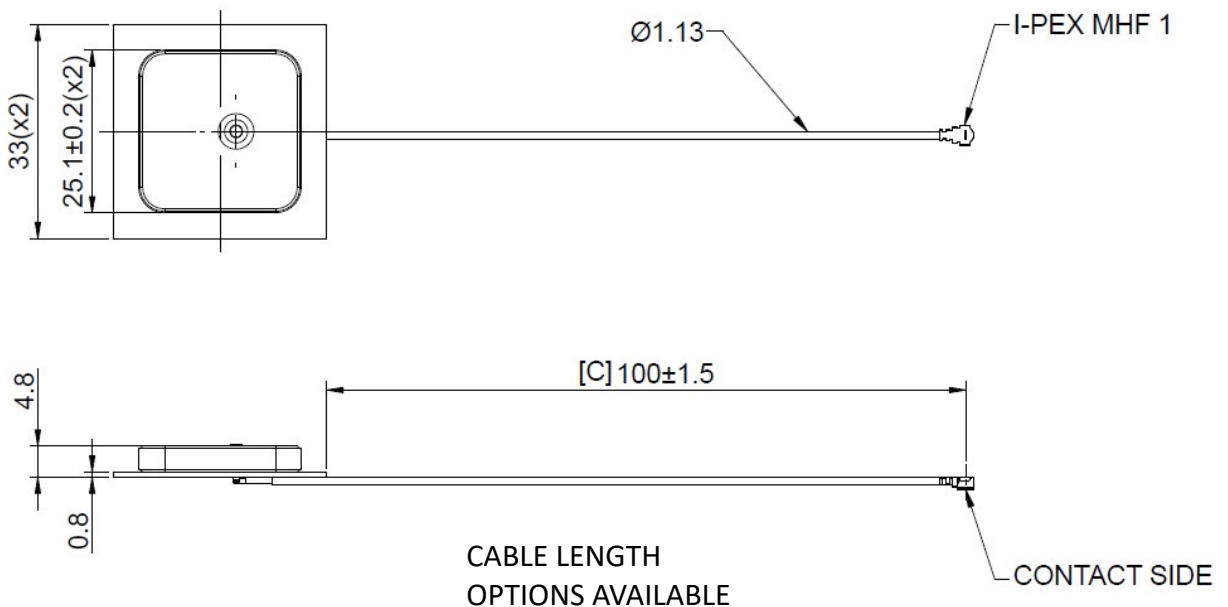
Environmental

Temperature Range (°C)	-40 to 105
Humidity	Non-condensing 40°C 95% RH

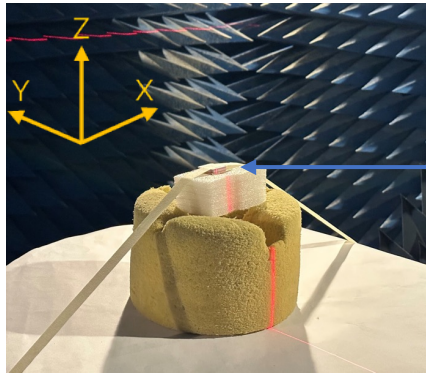
RoHS Compliant

Mechanical Drawing

Unit : mm

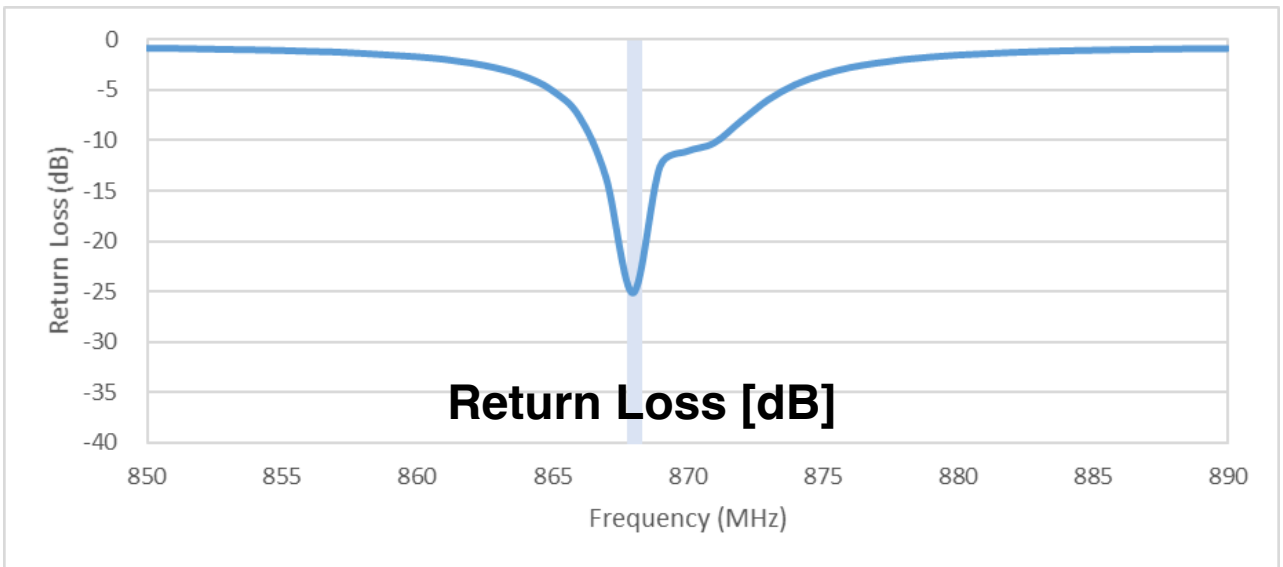


Charts In Free Space

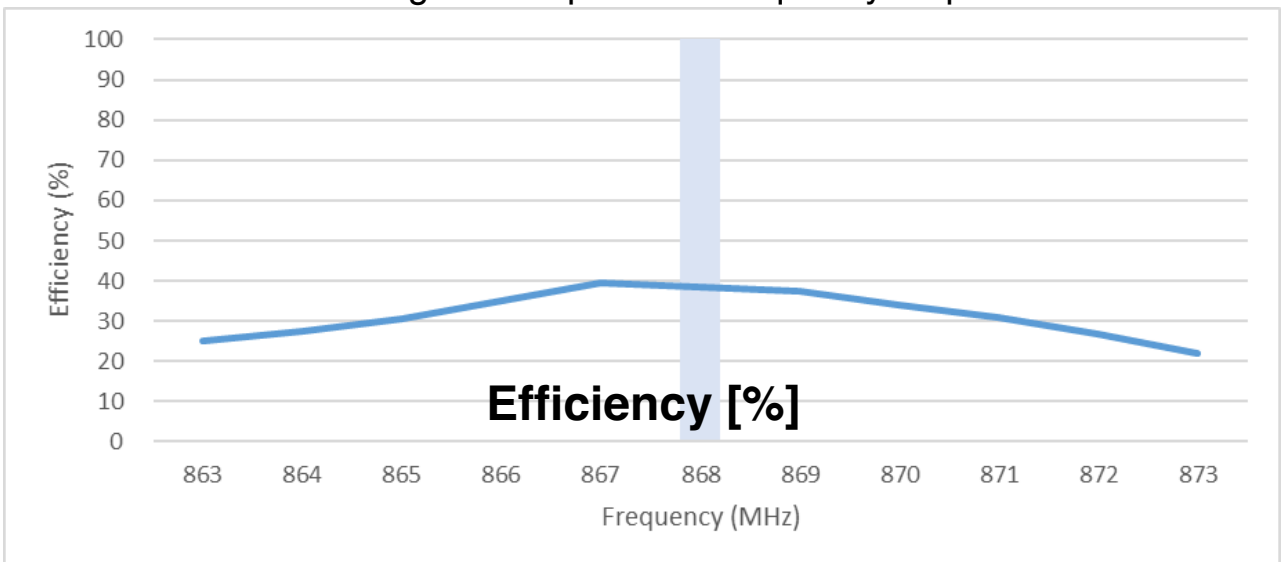


ST0684-11-403-U

Test setup, measurement performed in 3D anechoic chamber.

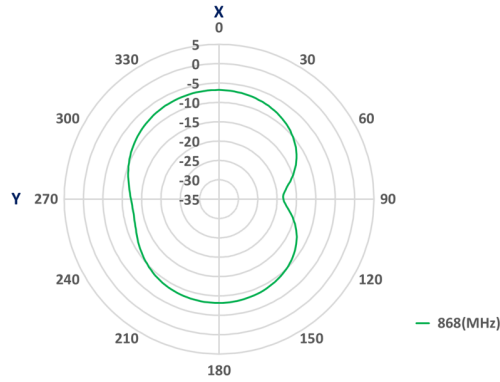


Blue background represents frequency response.

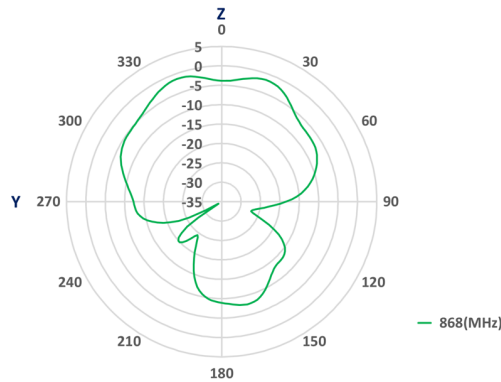


Radiation Pattern - Free Space

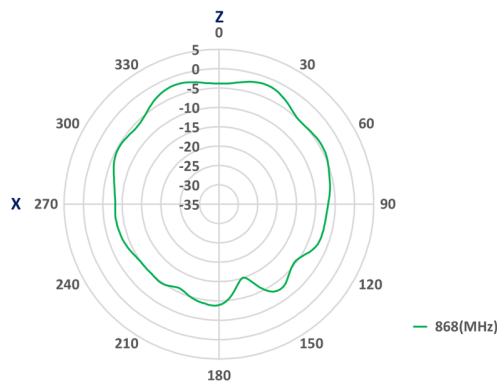
XY - Plane



YZ - Plane



XZ - Plane



Revisions

Rev.	Description	Date	ECN	Approval
A	Initial Release	2023-08-24	ST0684-11-404-U-RA00	ATC

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