

Datasheet

2.4-2.5GHz & 5.15-7.2GHz Internal Antenna



30 × 10 × 0.2mm

FPC Antenna

Features:

Wi-Fi 6E, also including Wi-Fi 6E new 6GHz band, Bluetooth, ZigBee
Adhesive backing on the FPC simplifies mounting within the device
Global frequency coverage

Applications:

Smart metering and utilities
Industrial IoT
Quick service restaurants
Medical devices



Electrical Specifications

Antenna Characteristics

Antenna Type	Radiation Pattern	Polarization	Max. Input Power	Impedance
FPC Antenna	Omni	Linear	1W	50Ω
Frequency (GHz)	2.4~2.5	5.15~5.825	5.925~7.125	
Return Loss (dB)	< -10	< -10	< -10	
Peak Gain (dBi)	2.1	3.1	3.6	
Average Gain (dB)	-1.2	-1.5	-1.1	
Efficiency (%)	77	71	78	

Mechanical Specifications

Environmental

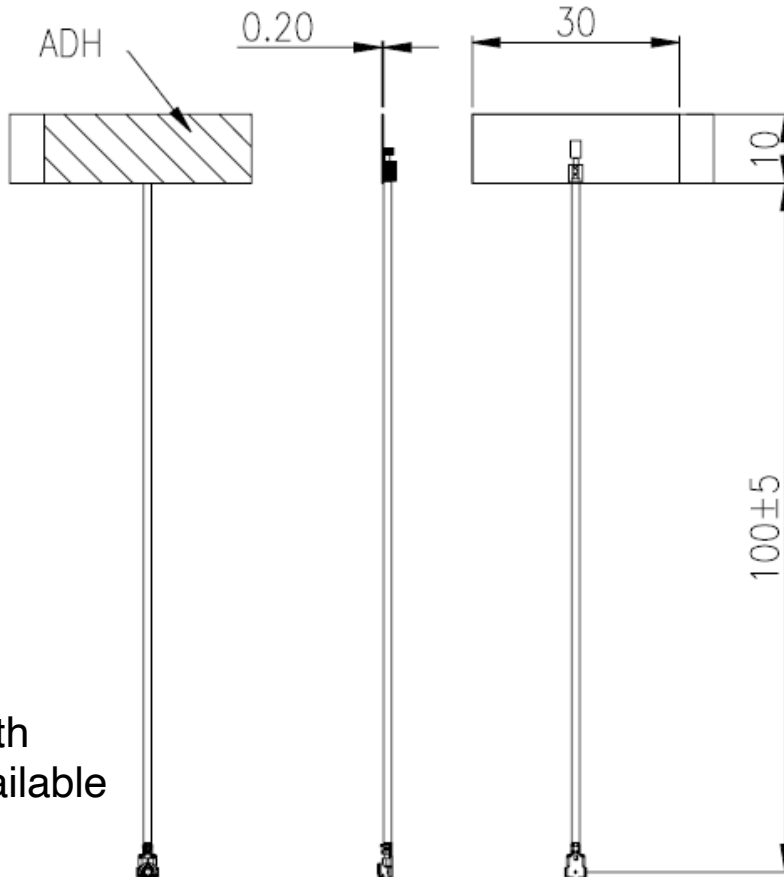
Temperature Range (°C)	-40 to 85
Humidity	Non-condensing 65°C 95% RH

RoHS Compliant

Part Number	Dim. (mm)	Weight (g)	Conn. Type	Cable Type	Material	Adhesive
ST1224-10-401-A	30 × 10 × 0.2	0.67	I-PEX MHF 1	Ø 1.37	PI	3M 467

Mechanical Drawing

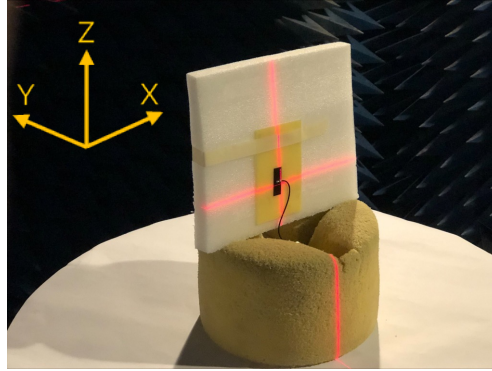
Unit : mm



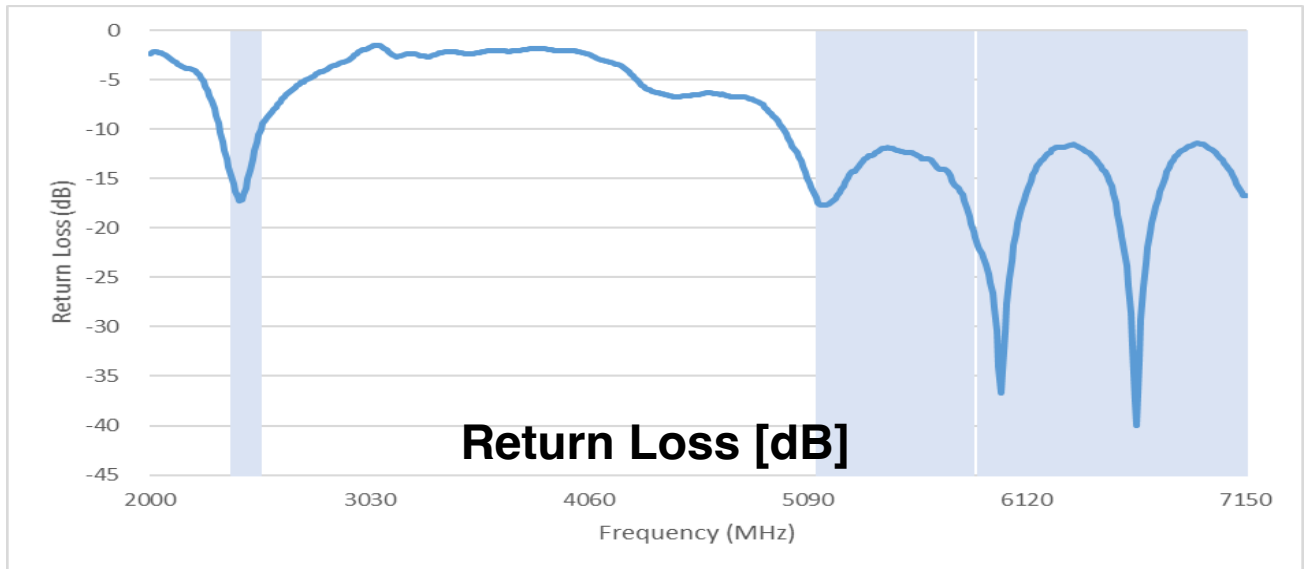
Cable length options available

ST1224-10-401-A

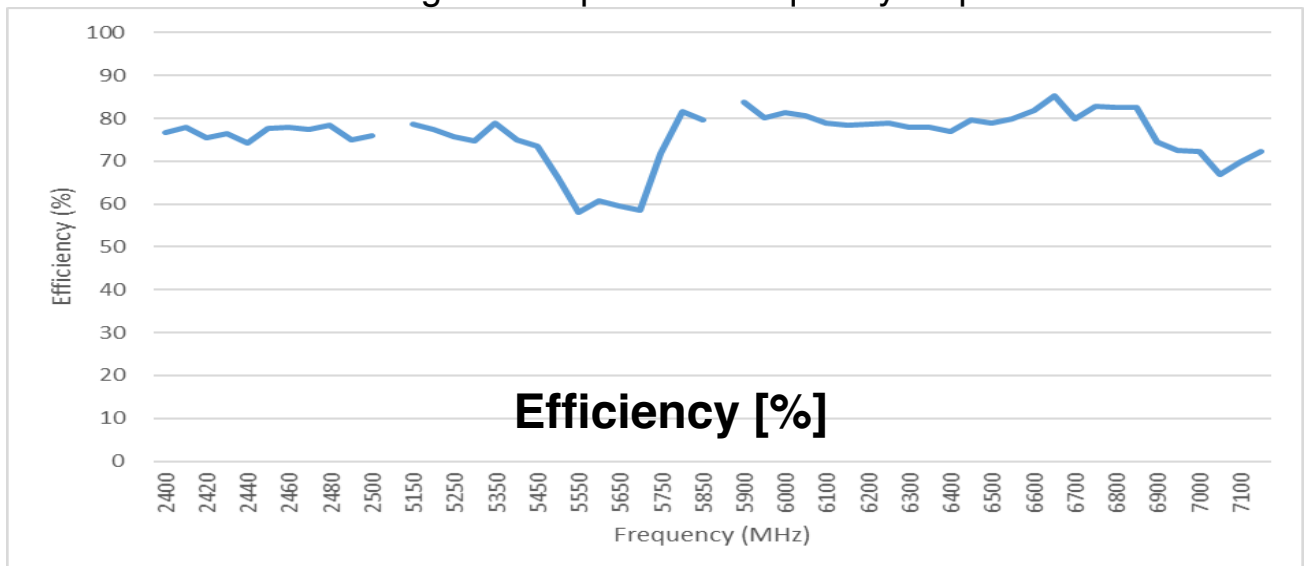
Charts In Free Space



Test setup, measurement performed in 3D anechoic chamber.

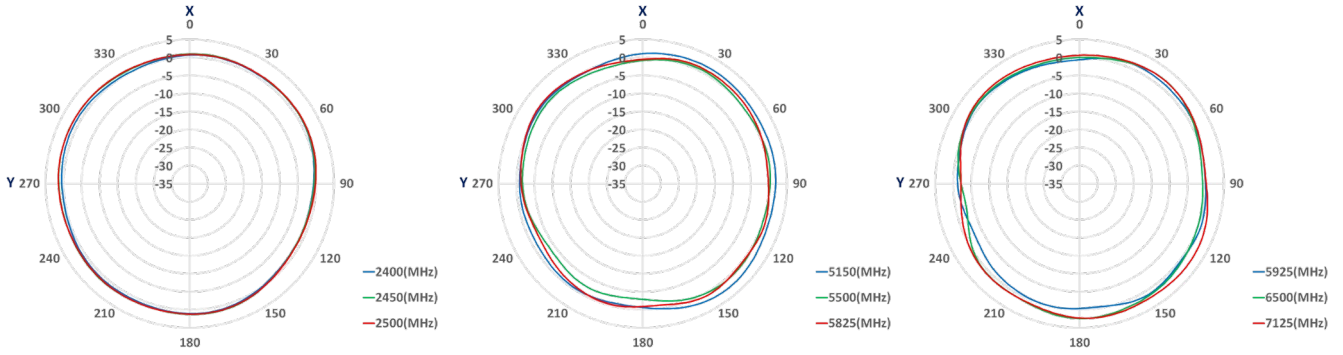


Blue background represents frequency response.

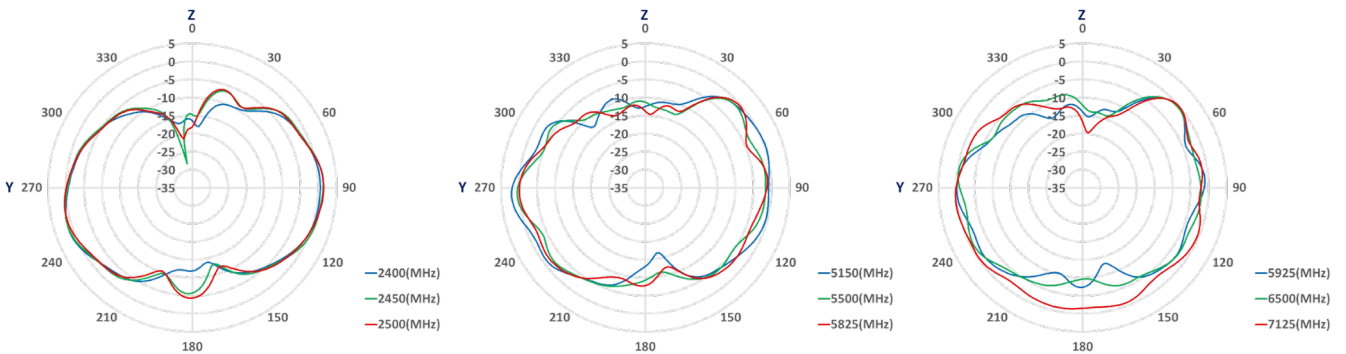


Radiation Pattern - Free Space

XY - Plane



YZ - Plane



XZ - Plane

