Datasheet
Sixfab Pico LTE Antenna

Designed by
Sixfab, Inc.

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1. Introduction

Proposed antenna is constructed for 4G LTE applications that operates over 7 different bands within an ergonomic blade design to blend well to the inside/outside of a device. • The antenna is designed to work with various allocations in free-space for ease of integration inside the proposed device.

The proposed antenna designed exclusively for the Sixfab Pico LTE.

Applications
• Routers
• Industrial devices
• Remote devices

2. Specifications

2.1 Absolute Maximum Ratings

- Terminal antenna for LTE applications.

• 4G bands: B2, B3,B4,B8,B12,B13,B20.

•1850-1910MHz, 1710-1725MHz, 1710-1755MHz, 880-915MHz, 699-716MHz, 777-787MHz, 832-862 MHz.

• High performance mounted antenna design.

• Dimensions (20 mm X 60 mm). • Available in two terminal options: Vertical and Horizontal allocations.

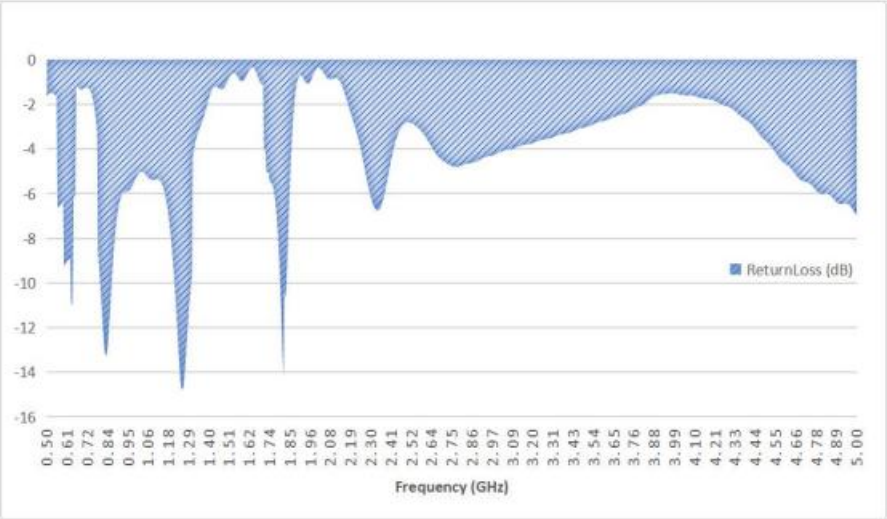
2.2 Recommended Operating Conditions

Name	Description	MIN	MAX	UNIT
Temperature	The ideal operating ambient temperature for the device is required for healthy functioning.	-10	55	°C
Humidity	The amount of water vapor in the air	0	75%	RH
Shelf life	The length of time a product may be stored without becoming unsuitable for use or consumption	0	5	Year

⚠ **Storage Place: To extend the lifespan, ensure long term health and reliable operation of the device, prevent direct exposure to sunlight.**

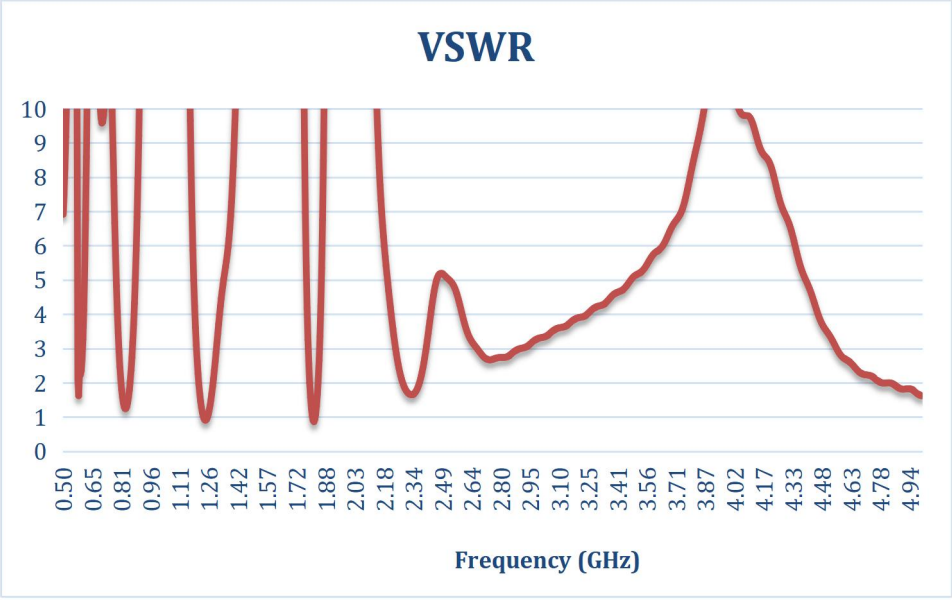
3. RF Characteristics

3.1 ReturnLoss

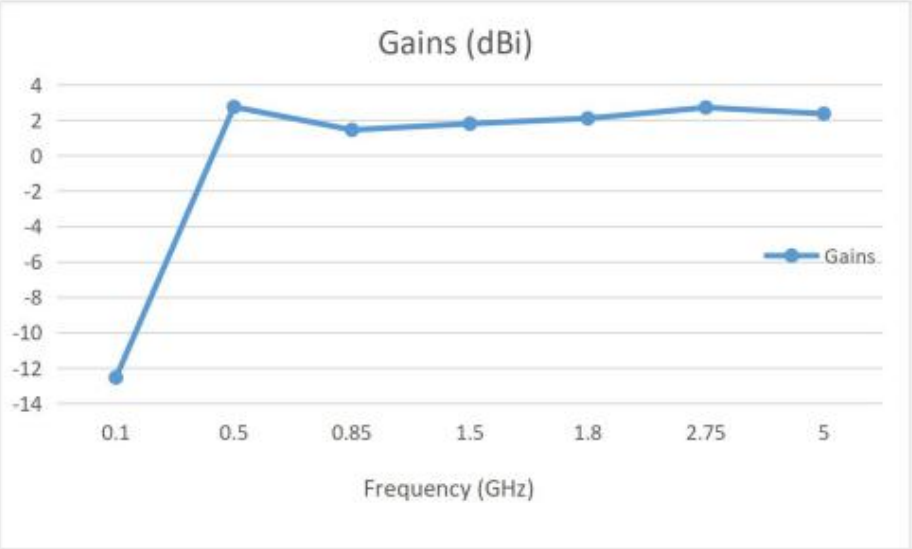


Bands	B2	B3	B4	B8	B12	B13	B20
Return Loss (dB)	-11.5	-7.2	-7.6	-12.1	-10.2	-13.1	-13.4

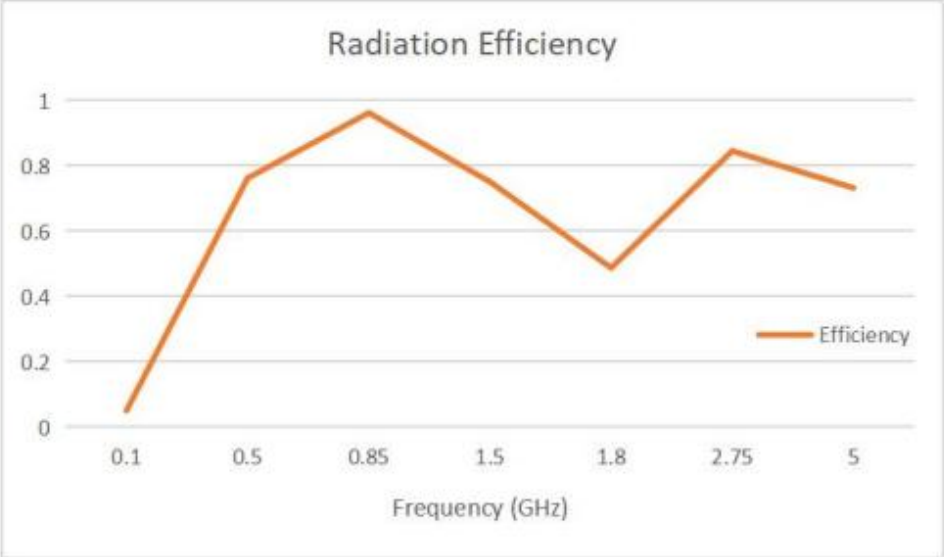
3.2 Voltage Standing Wave Ratio



3.3 Antenna Gain Over Frequency

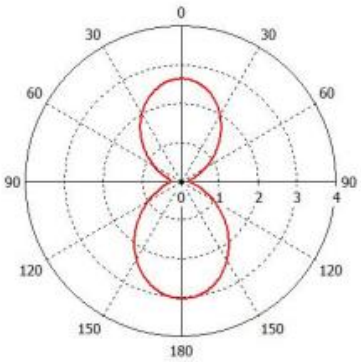


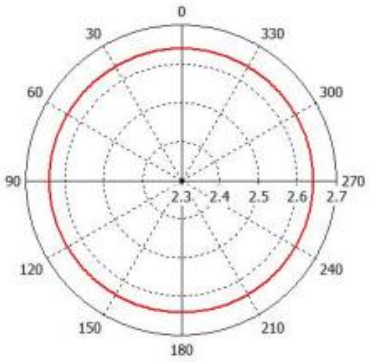
3.4 Antenna Efficiency Over Frequency



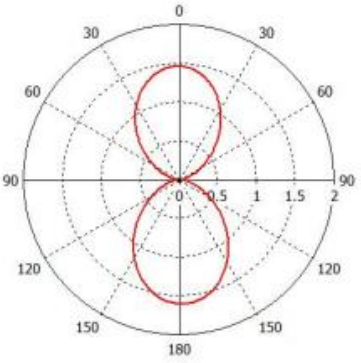
3.5 Radiation Patterns

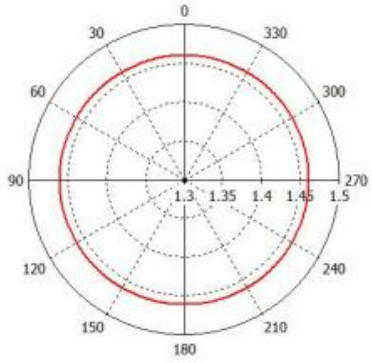
699-716 MHz



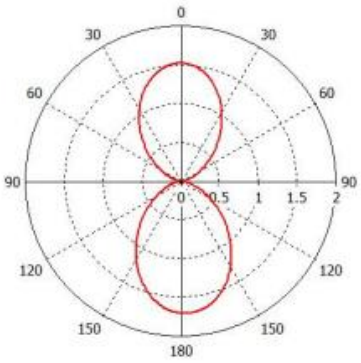


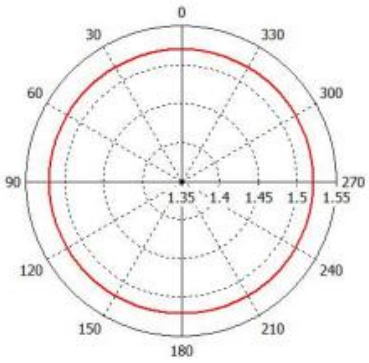
832-862 MHz

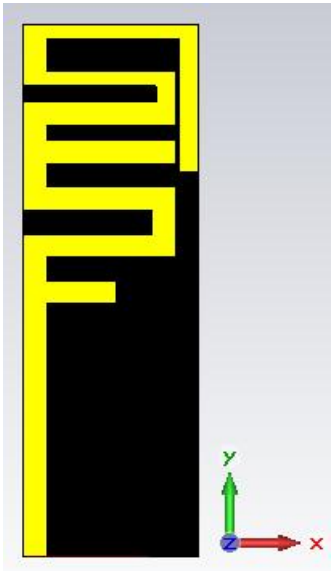




1710-1755MHz







4. Hazardous Material Regulation Conformance

The antenna has been tested to conform to RoHS requirements.