



# 3 dBi Embedded PCB Antenna 5,150-5,850 MHz UMCX Connector

## Antennas Technical Data Sheet

PE51211

### Features

- Highly efficient printed circuit board (PCB) design
- Designed for omni-directional applications
- Low profile, compact size
- IPEX, U.FL, UMCX compatible connector

### Applications

- Integrate into self contained wireless equipment
- Embedded applications requiring integration flexibility
- 5 GHz WLAN

### Description

The PE51211 is an omnidirectional antenna designed to integrate into devices requiring wireless capability. By embedding these antennas directly into a device, the need for external antennas is eliminated. The omni-directional radiation pattern makes it ideal for multipoint and mobile wireless systems.

### Configuration

Design	PCB
Band Type	Single
Radiation Pattern	Omni Directional
Cable Type	1.13mm
Cable Length	3.937 in [100 mm]
Connector Type	UMCX Plug
Number of Ports	1

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	5,150		5,850	GHz
Input VSWR			2:1	
Impedance		50		Ohms
Gain		3		dBi

### Mechanical Specifications

<b>Size</b>	
Overall Length	1.015748 in [25.8 mm]
Width	0.519685 in [13.2 mm]

### Environmental Specifications

<b>Temperature</b>	
Operating Range	-20 to +65 deg C

**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [3 dBi Embedded PCB Antenna 5,150-5,850 MHz UMCX Connector PE51211](#)

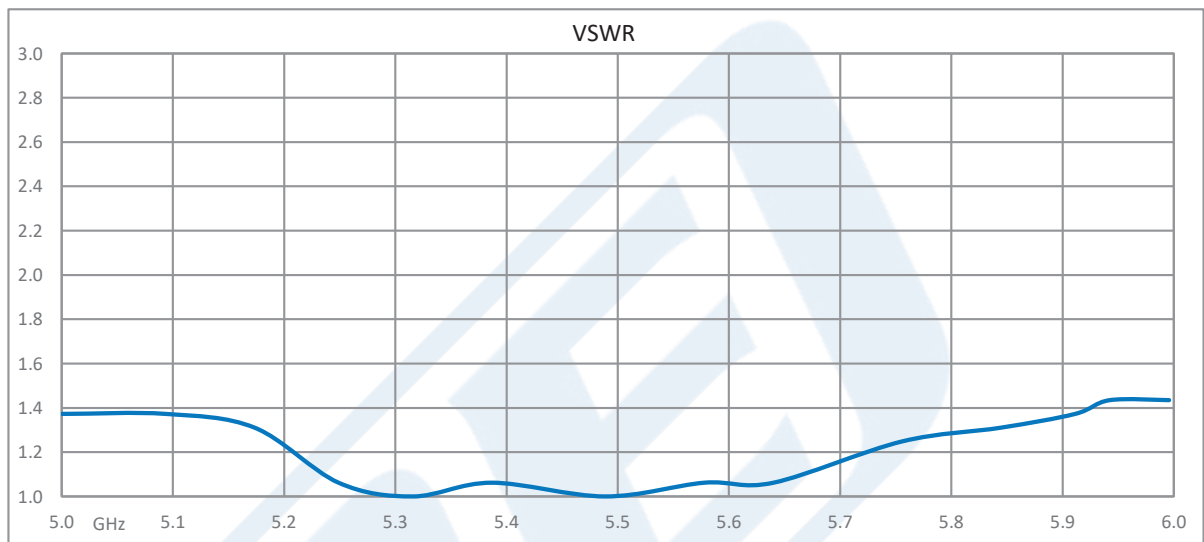


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#### Typical Radiation Pattern



3 dBi Embedded PCB Antenna 5,150-5,850 MHz UMCX Connector from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [3 dBi Embedded PCB Antenna 5,150-5,850 MHz UMCX Connector PE51211](https://www.pasternack.com/single-antenna-5.15-5.85-ghz-3-dbi-gain-umcx-pe51211-p.aspx)

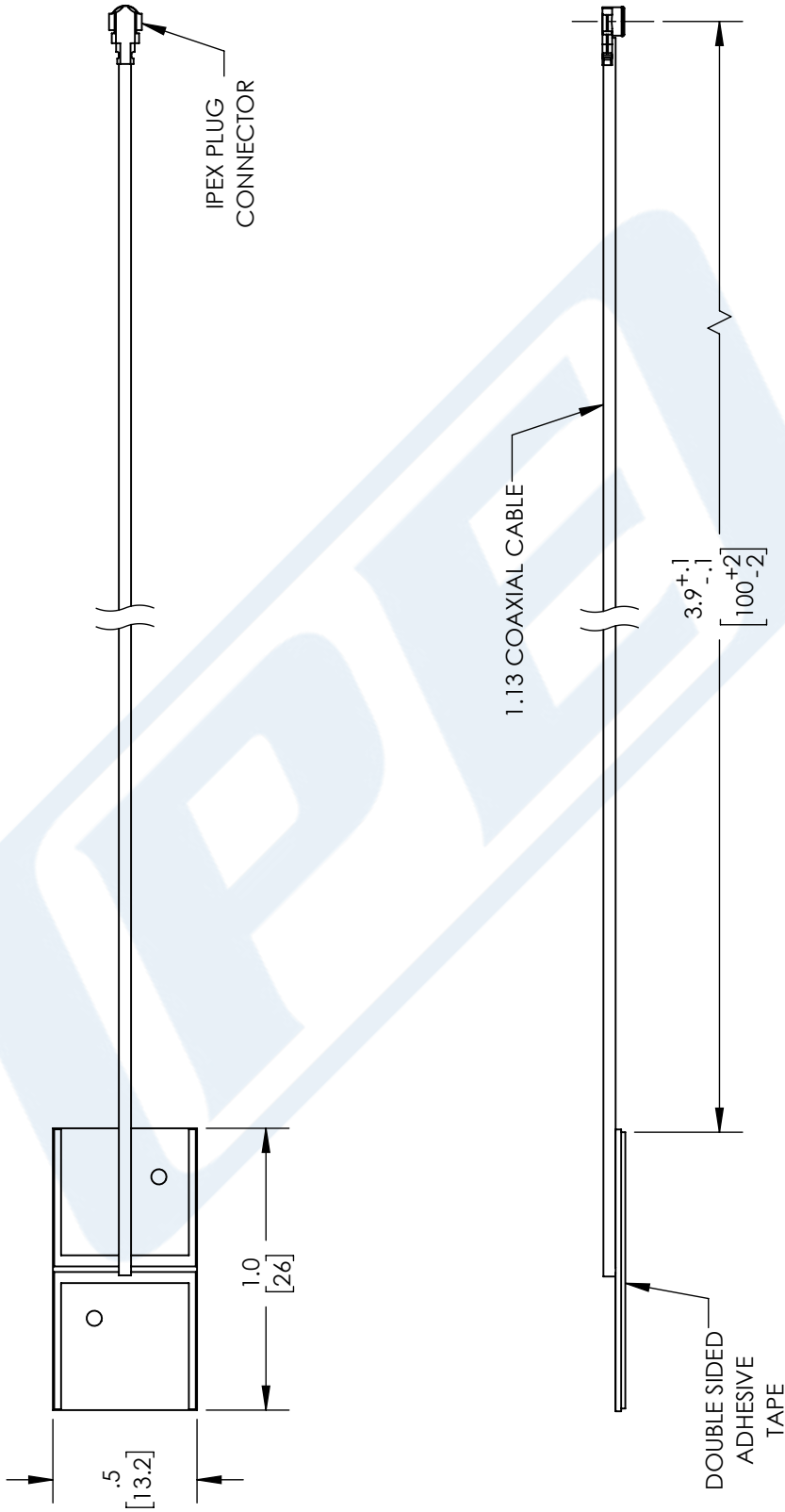
URL: <https://www.pasternack.com/single-antenna-5.15-5.85-ghz-3-dbi-gain-umcx-pe51211-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

# PE51211 CAD Drawing

3 dBi Embedded PCB Antenna 5,150-5,850 MHz UMCX Connector

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	06/18/2020	KHIETPAS



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:

.X = ±.2 [5.08] | FRACTIONS ± 1/32  
 .XX = ±.02 [ .51] | ANGLES ± 1°  
 .XXX = ±.005 [ .13]

CABLE LENGTH (L), TOLERANCES:  
 L ≤ 12 [305] = +1 [25] / -0  
 12 [305] < L ≤ 60 [1524] = +2 [51] / -0  
 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0  
 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0  
 300 [7620] < L = +5%L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

**PE PASTERNAK**  
 an INFINITI brand

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SIZE A | CAGE CODE 53919 | DRAWN BY SLI | ITEM NO. PE51211

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A

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