

2.5 dBi MultiBand Embedded PCB Antenna 2,400-5,900 MHz UMCX Connector

Antennas Technical Data Sheet

PE51201

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
- 2.4 GHz & 5 GHz WLAN

Description

The PE51201 is a multiband 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 | Multi |
| 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 | 2,400 | | 5,900 | GHz |
| Input VSWR | | | 2:1 | |
| Impedance | | 50 | | Ohms |
| Gain | | 2.5 | | dBi |

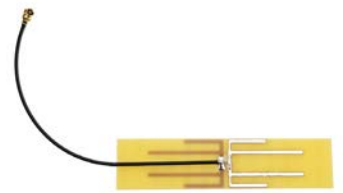
Specifications by Band

| Description | Band 1 | Band 2 | Band 3 | Band 4 | Band 5 | Units |
|-------------|-------------|-------------|--------|--------|--------|-------|
| Range | 2,400-2,500 | 4,900-5,900 | | | | MHz |

Mechanical Specifications

| | |
|----------------|---------------------|
| Size | |
| Overall Length | 2.59843 in [66 mm] |
| Width | 0.629921 in [16 mm] |
| Height | 0.0393701 in [1 mm] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2.5 dBi MultiBand Embedded PCB Antenna 2,400-5,900 MHz UMCX Connector PE51201](#)



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Environmental Specifications

Temperature

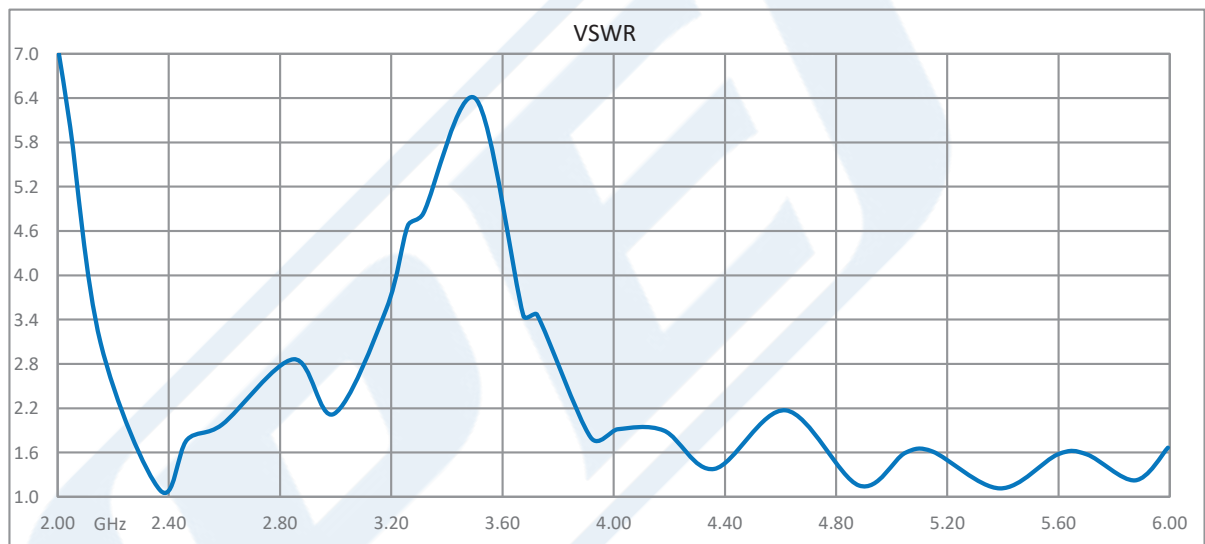
Operating Range

-40 to +70 deg C

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

Plotted and Other Data

Notes:



2.5 dBi MultiBand Embedded PCB Antenna 2,400-5,900 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: [2.5 dBi MultiBand Embedded PCB Antenna 2,400-5,900 MHz UMCX Connector PE51201](#)

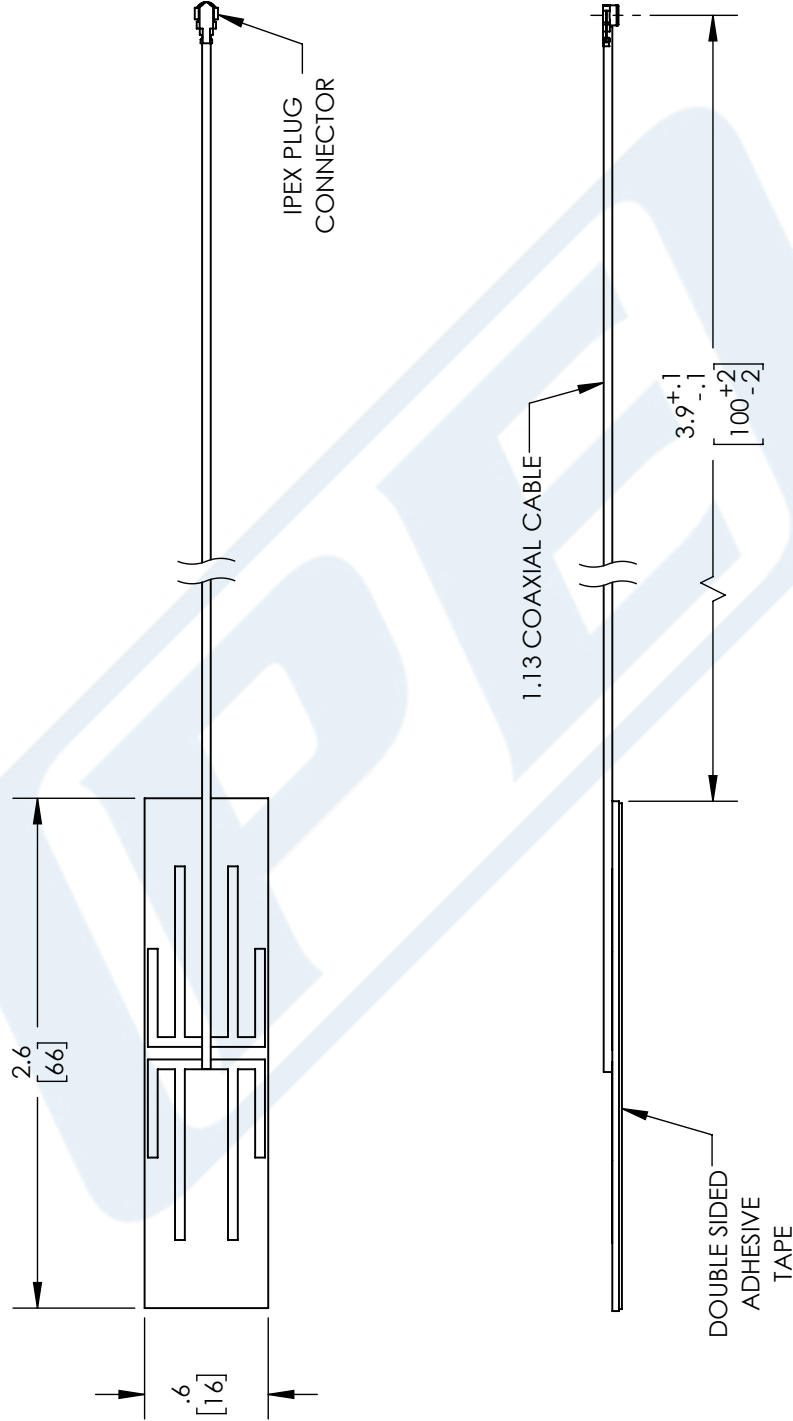
URL: <https://www.pasternack.com/multi-antenna-2.4-5.9-ghz-2.5-dbi-gain-umcx-pe51201-p.aspx>

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.

PE51201 CAD Drawing

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| 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 | [.008] | FRACTIONS | |
| .XX = ±.02 | [.51] | | ± 1/32 |
| .XXX = ±.005 | [.13] | ANGLES ± 1° | |

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.

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

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| | | | |
|------|-----------|----------|----------|
| SIZE | CAGE CODE | DRAWN BY | ITEM NO. |
| A | 53919 | SLI | PE51201 |

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