PASTERNACK
an INFINITE brand

4.52 dBi Rubber Duck Antenna 2,400-2,500 MHz RP-SMA Connector



Antennas Technical Data Sheet PE51RD1015

Features

- Flexible “Rubber Duck” Antenna
- Optional Magnetic Mount Available
- High Performance 4.5 dBi
- Reverse Polarity SMA Plug Connector
- Tilt and Swivel Design

Applications

- Multipoint and Mobile Applications & Bluetooth®
- 2.4 GHz ISM Band
- IEEE 802.11b, 802.11g, 802.11x (WiFi 6) Wireless LAN & IEEE 802.11n (Pre-N, Draft-N) Applications
- Public Wireless Hotspot
- Wireless Video Systems
- IoT Systems

Description

The Pasternack PE51RD1015 is an economical yet high performance omnidirectional “rubber-duck” antenna designed for the 2.4 GHz ISM band. It features a tilt-and-swivel Reverse Polarity SMA (RP-SMA) male connector, allowing them to be used vertically, at a right angle, or any angle in-between. It is a coaxial sleeve design with an omni-directional pattern. It is ideally suited for IEEE 802.11b, 802.11g, 802.11n and 802.11ax (WiFi 6) Wireless LANs, Bluetooth, IoT and other applications.

The high performance PE51RD1015 rubber-duck from Pasternack is a flexible antenna providing broad coverage and 4.5 dBi gain. Measuring 7.7 inches long, this 4.5 dBi antenna makes a great upgrade to OEM supplied antennas. It is suitable as a replacement RF antenna for 2.4 GHz radios that are equipped with RP-SMA connectors.

In addition to shipping the same day, our rubber duck antennas are high-quality components backed by expert technical support and sales personnel. Contact our knowledgeable and friendly technical support and sales staff for your answers on antennas or other Pasternack products.

Configuration

Design	Rubber Duck
Band Type	Single
Polarization	Linear
Connector Type	SMA Male Reverse Polarity
Number of Ports	1
Housing Material and Plating	TPEE, Black

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	2.4		2.5	GHz
Input VSWR			2:1	
Impedance		50		Ohms
Gain		4.52		dBi

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: 4.52 dBi Rubber Duck Antenna 2,400-2,500 MHz RP-SMA Connector PE51RD1015

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
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Mechanical Specifications

Housing Material	TPEE
Housing Plating/Color	Black
Radiator Material	Copper

Size

Overall Length	7.7 in [195.58 mm]
Width	0.51 in [12.95 mm]
Height	0.51 in [12.95 mm]
Weight	0.5 lbs [226.8 g]

Environmental Specifications

Temperature

Operating Range	-40 to +65 deg C
Storage Range	-40 to +80 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

4.52 dBi Rubber Duck Antenna 2,400-2,500 MHz RP-SMA 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: 4.52 dBi Rubber Duck Antenna 2,400-2,500 MHz RP-SMA Connector PE51RD1015

URL: https://www.pasternack.com/single-antenna-2.4-2.5-ghz-4.52-dbi-gain-sma-pe51rd1015-p.aspx

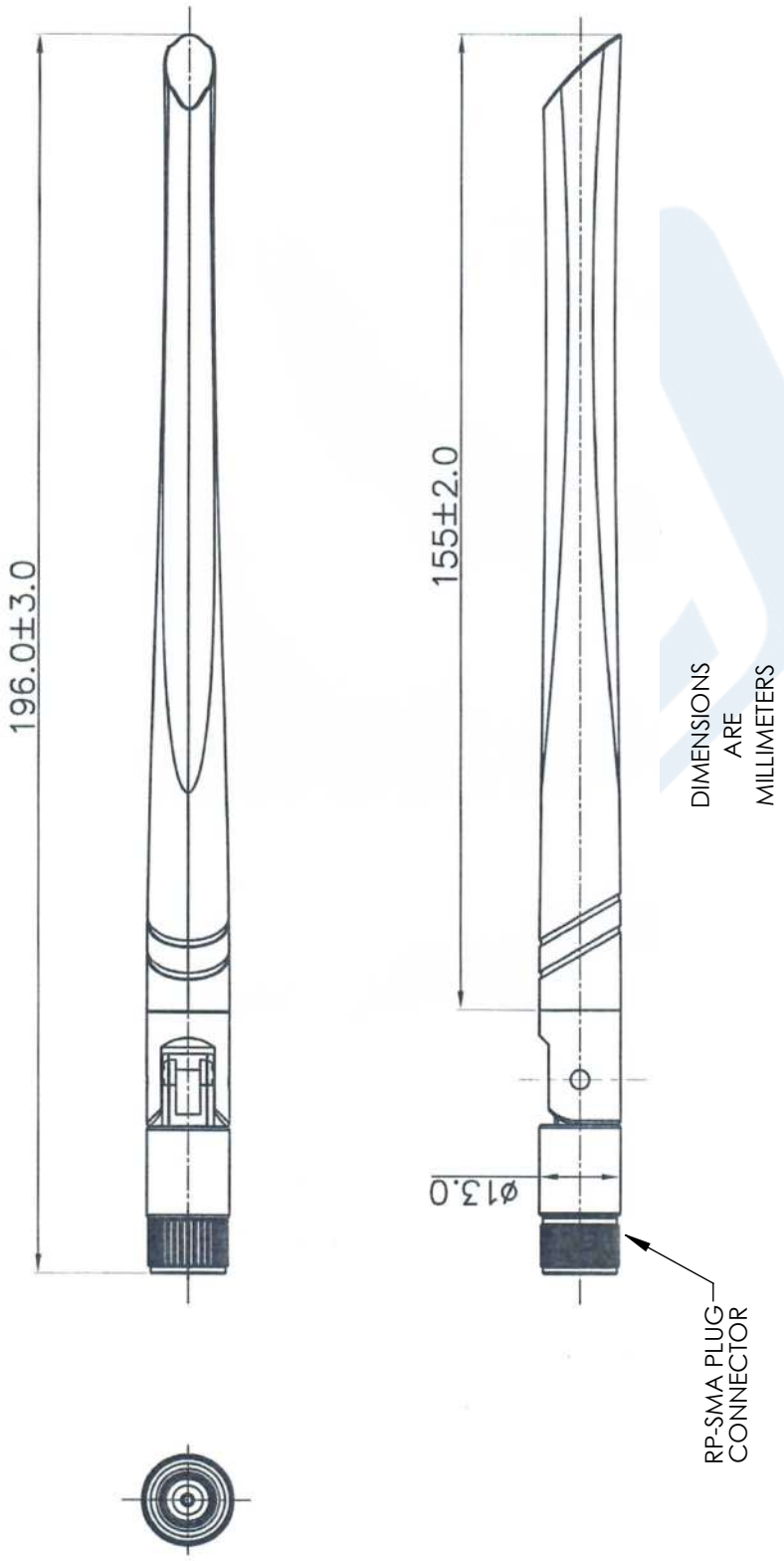
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PE51RD1015 CAD Drawing

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REVISIONS

REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	09/14/2020	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.

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THIRD-ANGLE PROJECTION

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SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	DZINN	PE51RD1015	A

SHEET 1 OF 1

SCALE N/A

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