



## 2.4 GHz 5 dBi Rubber Duck Antenna - RP-SMA Plug Connector

### Antennas Technical Data Sheet

PE51RD1007

#### Features

- High Performance - 5 dBi
- Flexible “Rubber Duck” antenna
- Tilt and swivel design
- Reverse Polarity SMA Plug Connector
- Optional Magnetic Mount Available

#### Applications

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

#### Description

This compact 2.4 GHz omni-directional “rubber-duck” antenna provides broad coverage and 5.5 dBi gain. It is a coaxial sleeve design with an omni-directional pattern. It is ideally suited for IEEE 802.11b and 802.11g wireless LANs, Bluetooth® and other WLAN applications.

Measuring 8.0 inches long, this flexible antenna features a tilt-and-swivel Reverse-Polarity SMA Plug connector, allowing them to be used vertically, at a right angle, or any angle in-between. It is suitable as a replacement RF antenna for many access points and radios that are equipped with reverse-polarity SMA connectors including D-Link®, Linksys® WET11 and others.

Application Note: This antenna is not for use with U.S.Robotics® RP-SMA equipped devices.

#### Configuration

Design	Rubber Duck
Band Type	Single
Radiation Pattern	Omni Directional
Polarization	Vertical
Cable Type	Coax Cable
Connector Type	SMA Plug Reverse Polarity
Number of Ports	1

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Input VSWR			2:1	
Impedance		50		Ohms
Gain		5.5		dBi

#### Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	2,400-2,500					MHz
Gain	5.5					dBi
Horizontal Beam Width	360					Degees
Vertical Beam Width	70					Degees

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: [2.4 GHz 5 dBi Rubber Duck Antenna - RP-SMA Plug Connector PE51RD1007](#)



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**Mechanical Specifications**

Radome Material	ABS
<b>Size</b>	
Overall Length	8.3 in [210.82 mm]
Width	0.8 in [20.32 mm]
Height	0.8 in [20.32 mm]
Weight	0.6 lbs [272.16 g]

**Environmental Specifications**

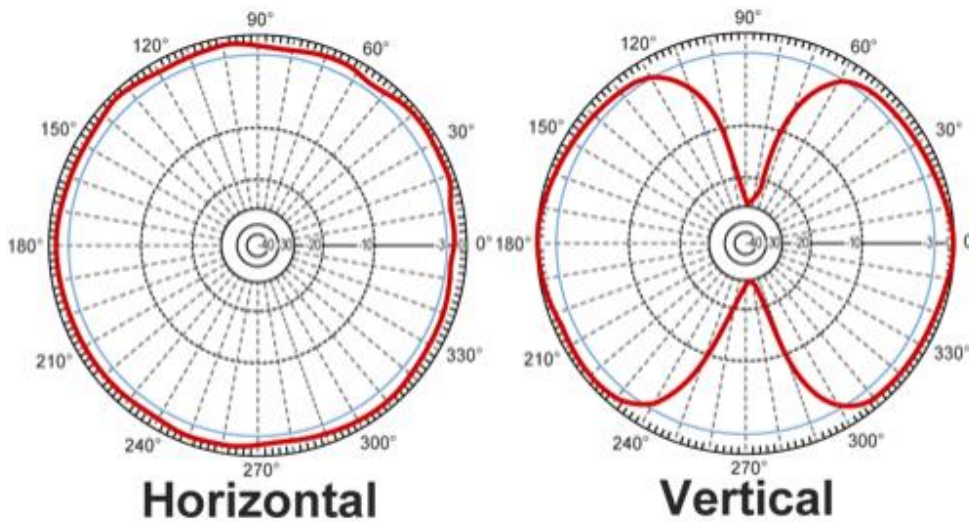
<b>Temperature</b>	
Operating Range	-40 to +85 deg C

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

**Plotted and Other Data**

Notes:

**Typical Radiation Pattern**



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2.4 GHz 5 dBi Rubber Duck Antenna - RP-SMA Plug 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.

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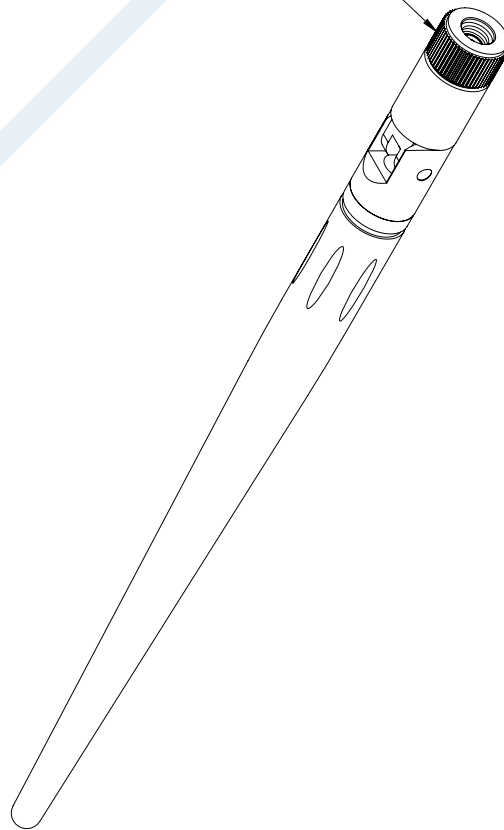
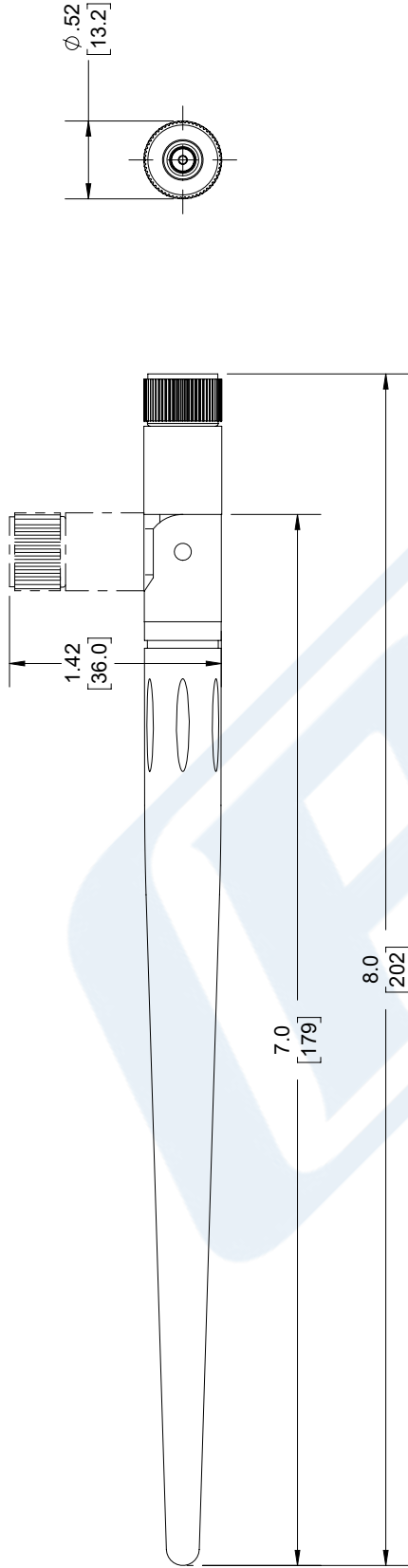
URL: <https://www.pasternack.com/single-antenna-5.5-dbi-gain-sma-pe51rd1007-p.aspx>

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# PE51RD1007 CAD Drawing

## 2.4 GHz 5 dBi Rubber Duck Antenna - RP-SMA Plug Connector

REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	2/18/2020
		M.MILLER



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 INFINIT brand

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SHEET 1 OF 1

SCALE N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO	REV
A	53919	K.DANG	PE51RD1007	A

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