

2.15 dBi, 3.7 inch UHF Rubber Duck Antenna,
426-505 MHz, SMA Male Connector, Vertical Polarization



FMANRBD1005

Features

- 426 MHz to 505 MHz, 2.15 dBi Gain
- SMA-male connector
- Heliflex whip antenna
- Plug and play
- 20W power handling
- VSWR < 3:1
- Vertical polarization

Applications

- PtP or PtMP applications
- Trunking for two-way radio comms
- UHF applications
- Public Safety / Emergency services
- Tetra and P-25 applications exclusively supported
- Land and Private mobile radio (LMR) (PMR)
- Fixed and mobile services

Description

The FMANRBD1005 rubber duck antenna from Fairview is part of our extensive line of directional antennas that we offer with global same-day shipping from our facilities certified to ISO 9001:2015. Fairview's high-quality single-band rubber duck antenna has a 2.15 dBi nominal gain and can be procured with no order limit. This rubber duck single-band 2.15 dBi antenna has a frequency range of 426 MHz to 505 MHz.

We lead the industry in supplying products like this 426 MHz to 505 MHz single-band antenna, along with other RF, microwave, and millimeter wave components. This rubber duck antenna from Fairview uses a SMA connector and has a maximum input power of 20 watts. Use our single-band rubber duck antenna with vertical polarization for fixed and mobile services, public safety or emergency services, trunking for two-way radio communications, land and private mobile radio (LMR) (PMR), PtP or PtMP, tetra, and P-25 applications.

Fairview's rubber duck antenna with 2.15 dBi gain has a SMA-type male connector. This SMA-series male connectorized omnidirectional antenna is 0.5 inches tall, 0.5 inches wide, and 6.3 inches long. The FMANRBD1005 UHF antenna has 360-degrees of horizontal and 80-degrees of vertical HPBW. Our high-quality antenna has a maximum input VSWR (voltage standing wave ratio) of 3:1.

Fairview's 50 Ohms impedance antenna can operate at temperatures ranging from -40 °C to 60 °C. This single-band rubber duck antenna is offered with expert technical support, PDF datasheets, and CAD drawings with dimensions and specifications. Order your 2.15 dBi UHF rubber duck antennas now and enjoy our international or domestic same-day shipping.

Configuration

| | |
|-------------------|------------------|
| Design | Rubber Duck |
| Band Type | Single |
| Radiation Pattern | Omni Directional |
| Polarization | Vertical |
| Connector Type | SMA Male |

Electrical Specifications

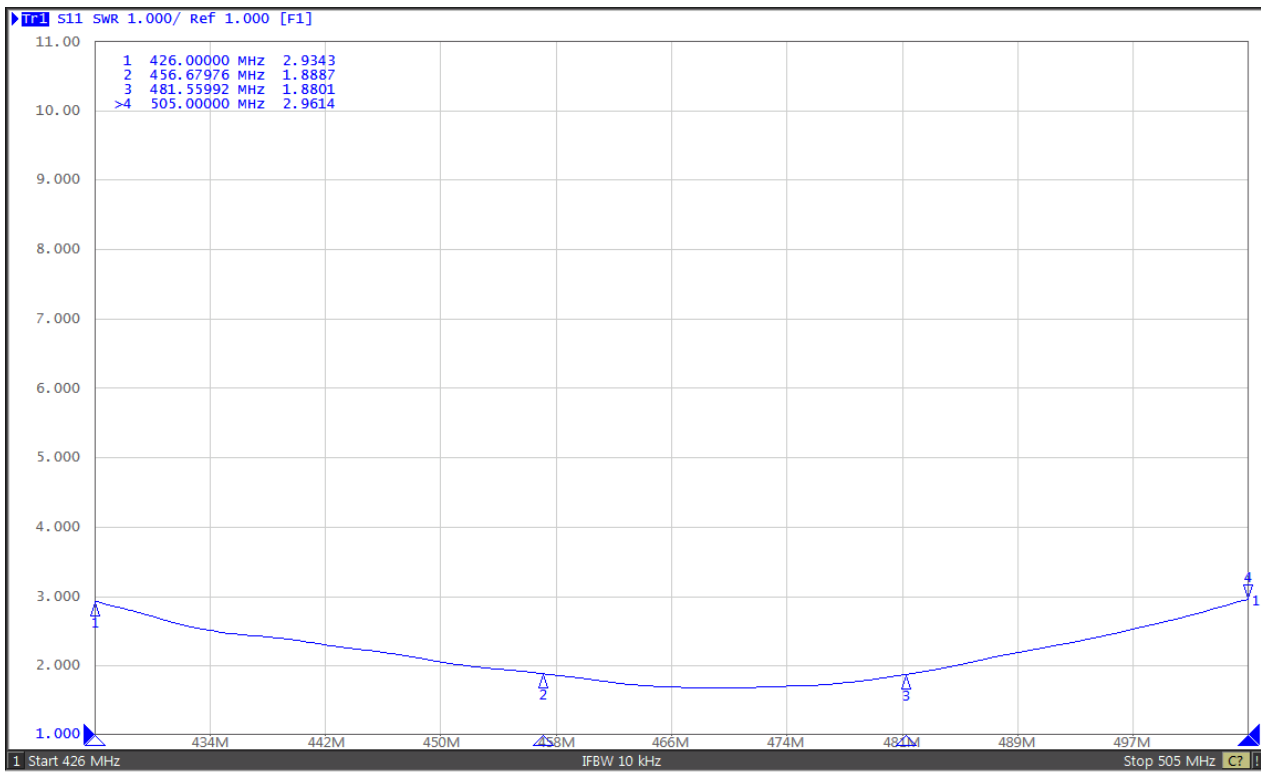
| Description | Minimum | Typical | Maximum | Units |
|---------------------------|---------|---------|---------|---------|
| Frequency Range | 426 | | 505 | MHz |
| Input VSWR | | | 3:1 | |
| Impedance | | 50 | | Ohms |
| Gain | | 2.15 | | dBi |
| Horizontal (Azimuth) HPBW | | 360 | | Degrees |
| Vertical (Elevation) HPBW | | 80 | | Degrees |
| Input Power | | | 20 | Watts |

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VSWR plot:



Mechanical Specifications

Size

| | |
|--------|---------------------|
| Length | 6.3 in [160.02 mm] |
| Width | 0.5 in [12.7 mm] |
| Height | 0.5 in [12.7 mm] |
| Weight | 1.91 lbs [866.36 g] |

Environmental Specifications

Temperature

| | |
|-----------------|------------------|
| Operating Range | -40 to +60 deg C |
|-----------------|------------------|

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

Plotted and Other Data

Notes:

Typical Radiation Pattern

Appendix

Electrical Downtilt: Angle in the antenna's elevation pattern in which the maximum gain occurs.

Gain: Antenna's average gain.

Front to Back Ratio @ 180°±30°: Average difference between the antenna's maximum gain and the maximum gain in the antenna's back lobe over ±30° angles.

Cross-polarization Ratio (dB): Typical difference between the co-polarization and cross-polarization gain across the sector's 3 dB Beam Width.

Dedicated to serving the needs of the Wireless Internet Service Provider (WISP) market, KP Performance Antennas offers purpose built products that reliably perform in the field. KP Performance Antennas product line consists of Yagi, Grid, Omni, Dish and other style antennas that operate in the 900 MHz, 2.4 GHz, 3 GHz, and 5 GHz frequencies.

2.15 dBi, 3.7 inch UHF Rubber Duck Antenna, 426-505 MHz, SMA Male Connector, Vertical Polarization from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

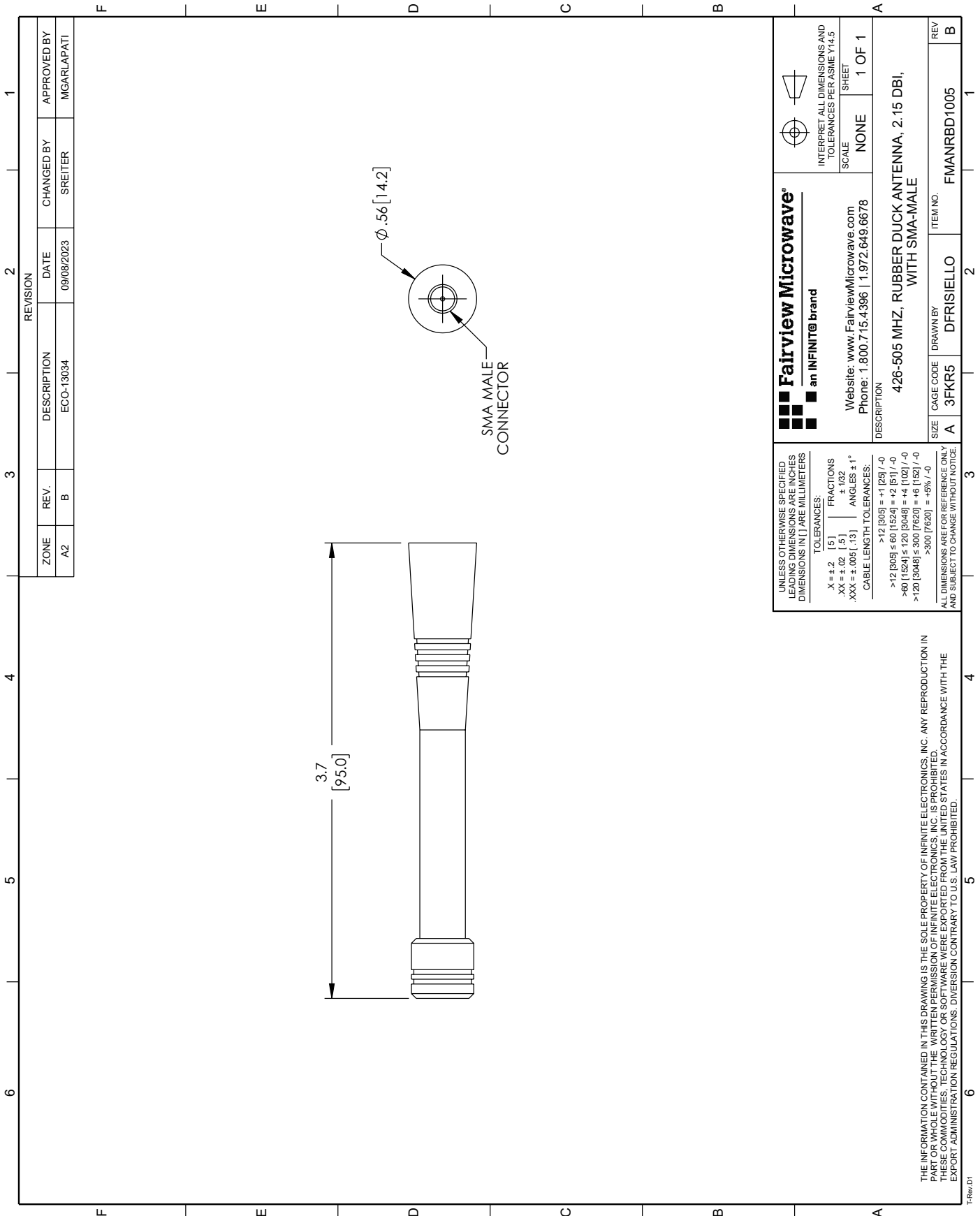
For additional information on this product, please click the following link: [2.15 dBi, 3.7 inch UHF Rubber Duck Antenna, 426-505 MHz, SMA Male Connector, Vertical Polarization FMANRBD1005](#)

URL: <https://www.fairviewmicrowave.com/2.15-dbi-rubber-duck-antenna-426-505-mhz-sma-connector-fmanrbd1005-p.aspx>

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FMANRBD1005 CAD Drawing

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| REVISION | | | |
|----------|------|-------------|-------------|
| ZONE | REV. | DESCRIPTION | DATE |
| A2 | B | ECC-13034 | 09/08/2023 |
| | | CHANGED BY | APPROVED BY |
| | | SREITER | MGARLAPATI |

| | |
|--|---|
| <p>Fairview Microwave an INFINIT® brand</p> <p>Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678</p> | <p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> |
| | <p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p> |
| <p>DESCRIPTION: 426-505 MHZ, RUBBER DUCK ANTENNA, 2.15 DBI, WITH SMA-MALE</p> | |
| <p>SIZE: A</p> <p>CAGE CODE: 3FKR5</p> | <p>ITEM NO: FMANRBD1005</p> |
| <p>UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.</p> <p>TOLERANCES:</p> <p>X = ±.2 [5] FRACTIONS ± 1/32</p> <p>.XX = ±.02 [0.5] ANGLES ± 1°</p> <p>-.XX = ±.005 [0.13] CABLE LENGTH TOLERANCES:</p> <p>>12 [305] = +1 [25] / -0</p> <p>>60 [1524] ≤ 60 [1524] = +2 [51] / -0</p> <p>>120 [3048] ≤ 120 [3048] = +4 [102] / -0</p> <p>>300 [7620] ≤ 300 [7620] = +8 [152] / -0</p> <p>ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.</p> | |

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