

## WR-137 to Type N Female Waveguide to Coax Adapter UDR70 with 5.38 GHz to 8.17 GHz in Aluminum

The FMWCA1086 is a right angle waveguide to coaxial adapter operating at a frequency range of 5.38 GHz to 8.17 GHz. This adapter offers a WR-137 waveguide interface size coupled with a precision tolerance UDR70 flange. The FMWCA1086 is constructed of aluminum and painted gray to ensure durability. The coaxial connector offered by this adapter uses an N Female connector.

### Configuration

|                |             |
|----------------|-------------|
| Waveguide Size | WR-137      |
| Flange         | UDR70       |
| RF Connector   | N Female    |
| Body Geometry  | Right Angle |

### Electrical Specifications

| Description      | Min  | Typ | Max    | Units |
|------------------|------|-----|--------|-------|
| Frequency Range  | 5.38 |     | 8.17   | GHz   |
| VSWR             |      |     | 1.25:1 |       |
| Insertion Loss   |      |     | 0.2    | dB    |
| Input Power (CW) |      |     | 100    | Watts |

### Mechanical Specifications

|             |                    |
|-------------|--------------------|
| <b>Size</b> |                    |
| Length      | 2.36 in [59.94 mm] |
| Width       | 2.69 in [68.33 mm] |
| Height      | 1.94 in [49.28 mm] |

|                     |          |
|---------------------|----------|
| <b>RF Connector</b> |          |
| Connector Type      | N Female |

|                            |          |
|----------------------------|----------|
| <b>Waveguide Interface</b> |          |
| Waveguide Type             | WR-137   |
| Flange Type                | UDR70    |
| Body Material and Plating  | Aluminum |

### Environmental Specifications

|                    |                  |
|--------------------|------------------|
| <b>Temperature</b> |                  |
| Operating Range    | -40 to +70 deg C |

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

### Plotted and Other Data

- Notes:
- Values at +25 °C, sea level unless stated otherwise



### Features:

- 5.38 GHz to 8.17 GHz Frequency Range
- WR-137 Waveguide Interface
- UDR70 Flange
- N Female RF Interface
- Comprehensive waveguide offering also include E-Bends, H-Bends, Sections, Filters, Terminations, Couplers, and more.

### Applications:

- Test Benches
- Radar
- Satellite
- Microwave Radio Systems
- Military and Space
- Communication Systems

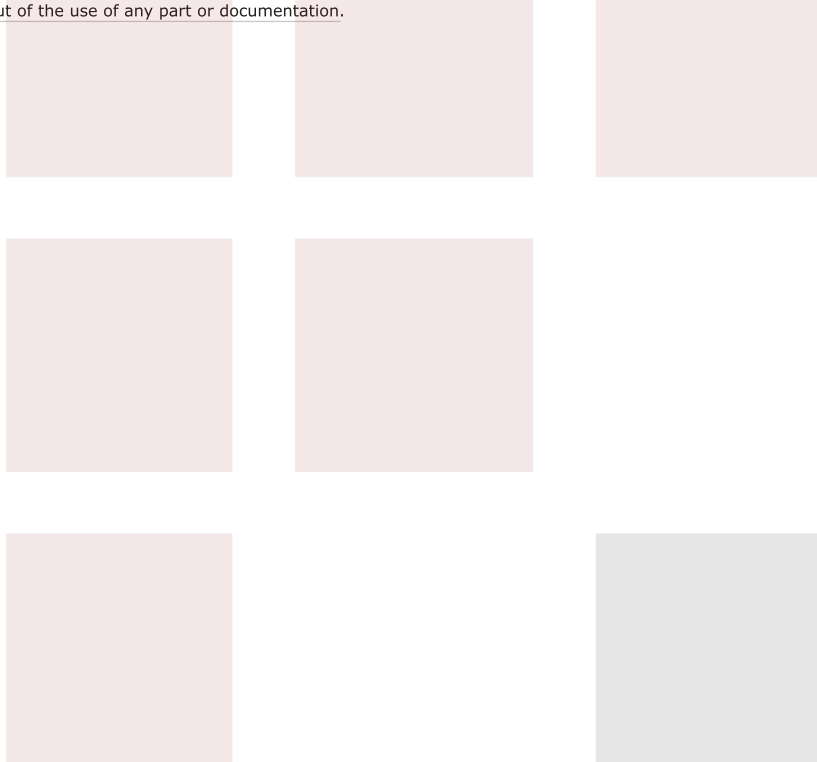
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WR-137 to Type N Female Waveguide to Coax Adapter UDR70 with 5.38 GHz to 8.17 GHz in Aluminum from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

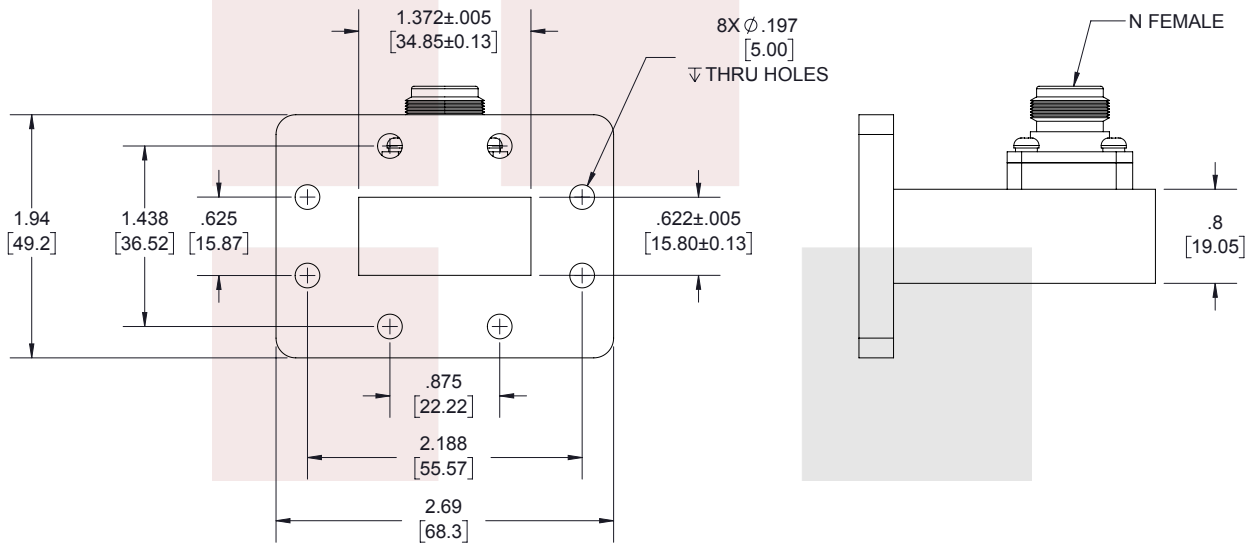
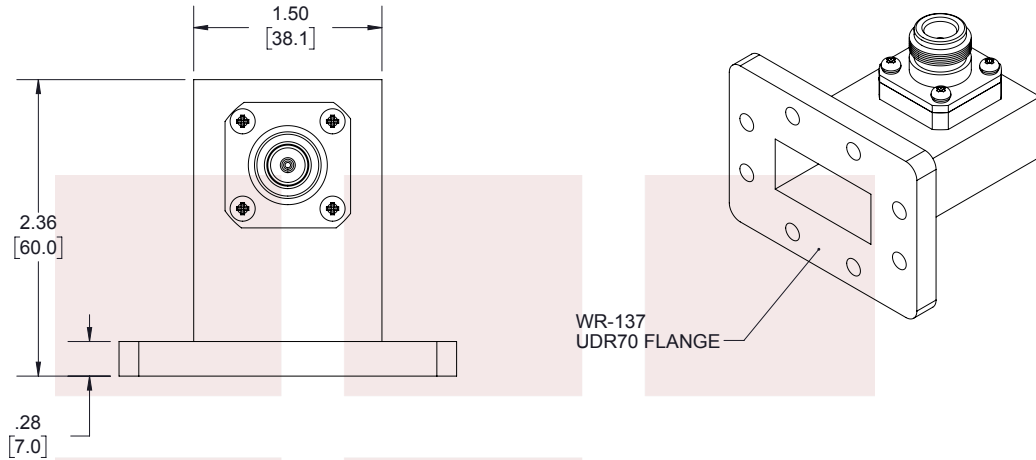
For additional information on this product, please click the following link: [WR-137 to Type N Female Waveguide to Coax Adapter UDR70 with 5.38 GHz to 8.17 GHz in Aluminum FMWCA1086](#)

URL: <https://www.fairviewmicrowave.com/wr137-type-n-female-waveguide-coax-adapter-udr70-fmwca1086-p.aspx>

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| REVISIONS |                 |            |          |
|-----------|-----------------|------------|----------|
| REV.      | DESCRIPTION     | DATE       | APPROVED |
| A         | INITIAL RELEASE | 04/30/2020 | SPONG    |



LABEL:

FAIRVIEW MICROWAVE  
FMWCA1086  
D/C: YYWW

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TITLE

WR-137 to Type N Female Waveguide to Coax Adapter  
UDR70 with 5.38 GHz to 8.17 GHz in Aluminum

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

TOLERANCES: CABLE LENGTH (L) TOLERANCES:

|                    |             |   |
|--------------------|-------------|---|
| .X = ±.2 [5.08]    | FRACTIONS   | L ≤ 12 [305] = +1 [25] / -0                 |
| .XX = ±.02 [.51]   | ± 1/32      | 12 [305] < L ≤ 60 [1524] = +2 [51] / -0     |
| .XXX = ±.005 [.13] | ANGLES ± 1° | 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0  |
|                    |             | 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0 |
|                    |             | 300 [7620] < L = +5%L / -0                  |

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

|           |                    |                       |                       |          |
|-----------|--------------------|-----------------------|-----------------------|----------|
| SIZE<br>A | CAGE CODE<br>3FKR5 | DRAWN BY<br>BPUCHASKI | ITEM NO.<br>FMWCA1086 | REV<br>A |
|-----------|--------------------|-----------------------|-----------------------|----------|

T-Rev.D