

**WR-90 to N Female Waveguide to Coax Adapter  
 UDR100 Flange With 8.2 GHz to 12.4 GHz Frequency  
 Range For X Band**

The 90AC206NB is a waveguide to coaxial adapter with a frequency range of 8.2 to 12.4 GHz, operating in the X band. This adapter offers a precision tolerance UDR100 flange and a WR-90 waveguide interface size. 90AC206NB is constructed of aluminum to ensure durability and repeatable RF performance. The coaxial connector offered by this adapter uses an N female connector and the package is REACH and RoHS compliant.

**Configuration**

|                |             |
|----------------|-------------|
| Waveguide Size | WR-90       |
| Flange         | UDR100      |
| RF Connector   | N Female    |
| Impedance      | 50 Ohms     |
| Body Geometry  | Right Angle |

**Electrical Specifications**

| Description        | Min | Typ | Max    | Units  |
|--------------------|-----|-----|--------|--------|
| Frequency Range    | 8.2 |     | 12.4   | GHz    |
| VSWR               |     |     | 1.25:1 |        |
| Input Power (CW)   |     |     | 150    | Watts  |
| Input Power (Peak) |     |     | 3      | KWatts |

**Mechanical Specifications**

**Size**

|        |                      |
|--------|----------------------|
| Length | 2.09 in [53.09 mm]   |
| Width  | 1.59 in [40.39 mm]   |
| Height | 1.52 in [38.61 mm]   |
| Weight | 0.12699 lbs [57.6 g] |

**RF Connector**

|                              |                            |
|------------------------------|----------------------------|
| Connector Type               | N Female                   |
| Contact Material and Plating | Beryllium Copper, Gold     |
| Body Material and Plating    | Passivated Stainless Steel |
| Torque                       | 13 in-lbs [1.47 Nm]        |

**Waveguide Interface**

|                           |          |
|---------------------------|----------|
| Waveguide Type            | WR-90    |
| Flange Type               | UDR100   |
| Body Material and Plating | Aluminum |

**Environmental Specifications**

**Temperature**

|                 |                   |
|-----------------|-------------------|
| Operating Range | -55 to +120 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:**

- X Band, 8.2 to 12.4 GHz Frequency Range
- WR-90 Waveguide Interface with UDR100 Flange
- N Female Coaxial Interface
- Comprehensive waveguide offerings also include E-Bends, H-Bends, Sections, Filters, Terminations, Couplers, and more.

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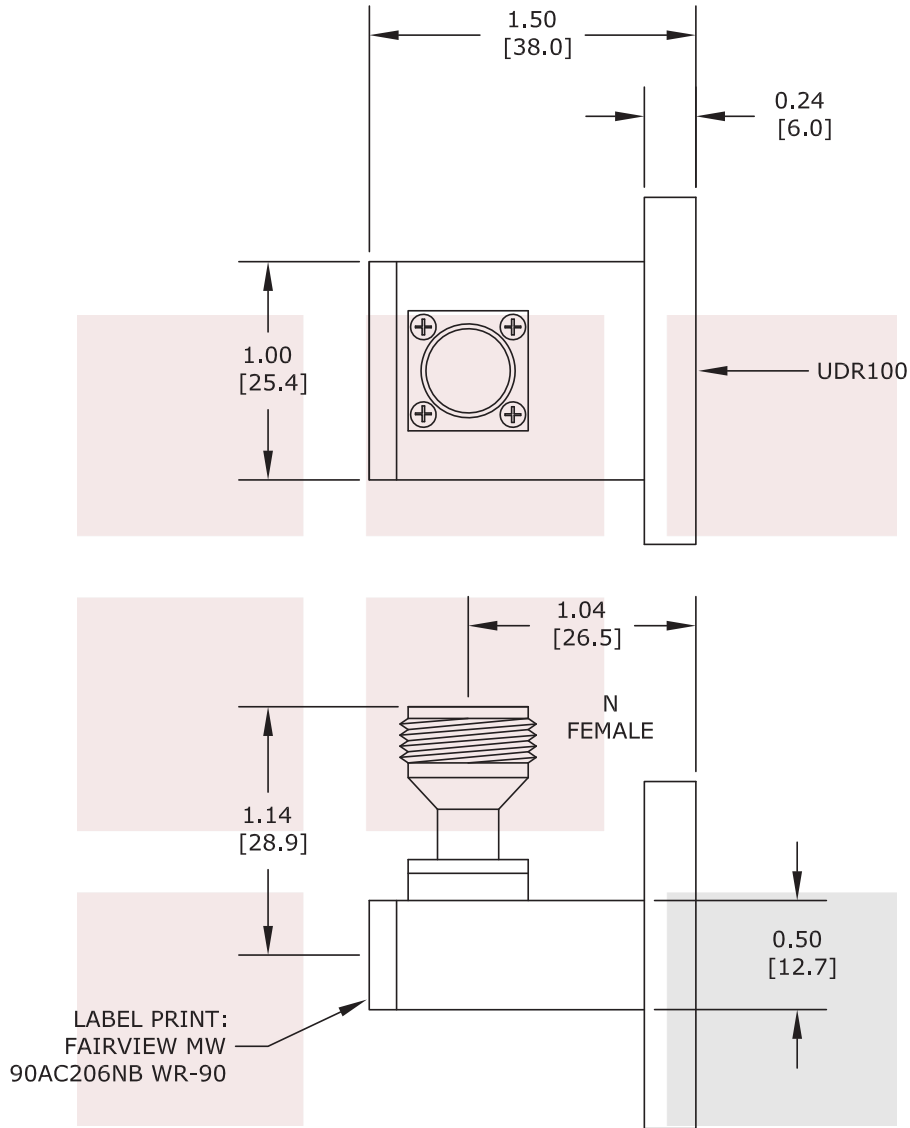
WR-90 to N Female Waveguide to Coax Adapter UDR100 Flange With 8.2 GHz to 12.4 GHz Frequency Range For X Band from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-90 to N Female Waveguide to Coax Adapter UDR100 Flange With 8.2 GHz to 12.4 GHz Frequency Range For X Band 90AC206NB](#)

URL: <https://www.fairviewmicrowave.com/wr-90-n-female-connector-waveguide-coax-adapter-8.2-12.4-ghz-90ac206nb-p.aspx>

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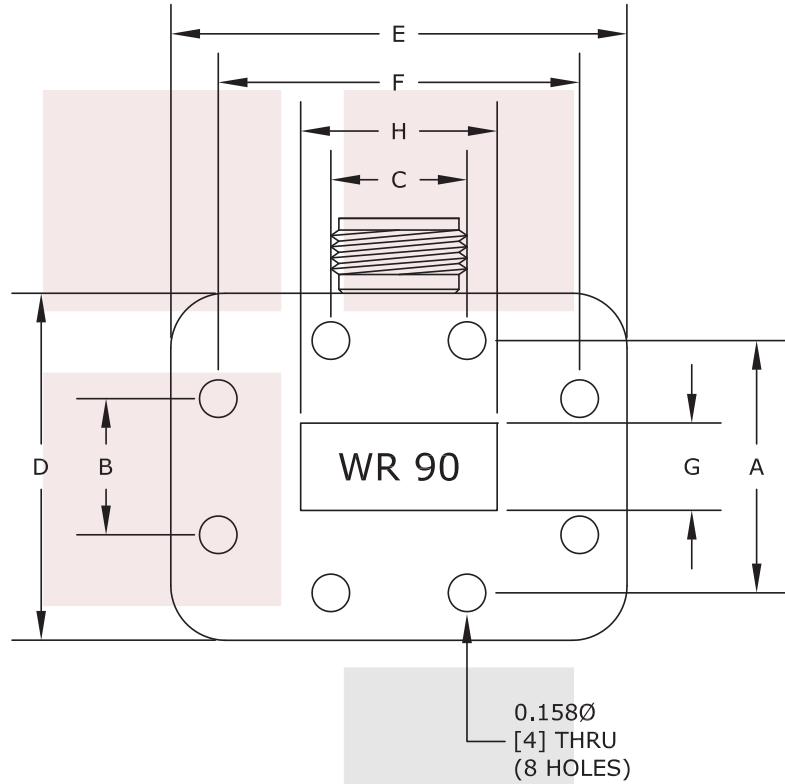


| STANDARD TOLERANCES |       |
|---------------------|-------|
| .X                  | ±0.2  |
| .XX                 | ±0.1  |
| .XXX                | ±0.05 |

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

|   |        |   |       |                    |             |
|---|--------|---|-------|--------------------|-------------|
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| TITLE<br>WR-90 to N Female Waveguide to Coax Adapter<br>UDR100 Flange With 8.2 GHz to 12.4 GHz Frequency Range For X Band |        | DWG NO<br>90AC206NB   |       | CAGE CODE<br>3FKR5 |             |
| CAD FILE  | 072516 | SHEET   | SCALE | N/A                | SIZE A 2233 |

| UDR100    |        |       |
|-----------|--------|-------|
| Dimension | Inches | mm    |
| A         | 1.156  | 29.36 |
| B         | 0.624  | 15.84 |
| C         | 0.624  | 15.84 |
| D         | 1.590  | 40.39 |
| E         | 2.090  | 53.09 |
| F         | 1.656  | 42.06 |
| G         | 0.400  | 10.16 |
| H         | 0.900  | 22.86 |



**STANDARD TOLERANCES**

- .X ±0.2
- .XX ±0.1
- .XXX ±0.05

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