

N-Type Female (Jack) Termination (Load)  
2 Watts, DC to 18 GHz, Brass



**FMTR1170**

**Features**

- DC to 18 GHz Frequency Range
- VSWR <1.2:1
- Max Power 2 Watt (CW)
- N-Type Female Coaxial Interface

**Applications**

- Wireless
- SatCom
- Radar Systems
- Test and Measurement
- Commercial and Military Communications

**Description**

Fairview Microwave's FMTR1170 is an RF termination (also called RF load or dummy load) that operates from DC to 18 GHz and handles up to 2 Watt (CW). Our N-Type termination/load has a female gender. FMTR1170 N-Type load termination offers 1.2:1 VSWR max.

RF load / termination are indispensable components in many RF, microwave and millimeter wave systems where signal reflections from unused ports can potentially damage the device or reduce the signal integrity. By using a terminator on an unused port with a matched load (dummy load), the incident energy will be absorbed with minimal reflection. These termination components are commonly used to terminate devices such as couplers, circulators, and switches. They are also widely used in measurement systems to ensure accurate results. Fairview Microwave offers a huge selection of RF, microwave and millimeter wave terminations up to 65 GHz with excellent performance over the entire operating range and power handling capabilities up to 800 Watt (CW).

**Electrical Specifications**

| Description                          | Minimum | Typical | Maximum | Units |
|--------------------------------------|---------|---------|---------|-------|
| Frequency Range                      | DC      |         | 18      | GHz   |
| Impedance                            |         | 50      |         | Ohms  |
| VSWR, Input                          |         |         | 1.2:1   |       |
| Input Power (CW)                     |         |         | 2       | Watts |
| Derated linearly to 1.5W @ 105°C     |         |         |         |       |
| Dielectric Withstanding Voltage (AC) |         |         | 2,500   | Vrms  |
| Operating Voltage (AC)               |         |         | 1,000   | Vrms  |

**Mechanical Specifications**

**Size**

|        |                     |
|--------|---------------------|
| Length | 1.043 in [26.49 mm] |
| Width  | 0.622 in [15.8 mm]  |
| Height | 0.622 in [15.8 mm]  |
| Weight | 0.07 lbs [31.75 g]  |

**Configuration**

|               |                                  |
|---------------|----------------------------------|
| Connector     | N Female                         |
| Mating Torque | 6 to 10 in-lbs [0.68 to 1.13 Nm] |

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**Material Specifications**

| Description         | Material         | Plating               |
|---------------------|------------------|-----------------------|
| Connector 1 Contact | Beryllium Copper | Gold over nickel      |
| Insulation          | PPO              |                       |
| Connector 1 Body    | Brass            | Copper-Tin-Zinc Alloy |

**Environmental Specifications**

**Temperature**

Operating Range

-40 to +70 deg C

Humidity

MIL-STD-202, Method 106

Thermal Shock

MIL-STD-202, Method 107, Condition B

Salt Spray

MIL-STD-202, Method 101, Condition B

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

**Plotted and Other Data**

Notes:

N-Type Female (Jack) Termination (Load) 2 Watts, DC to 18 GHz, Brass 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.

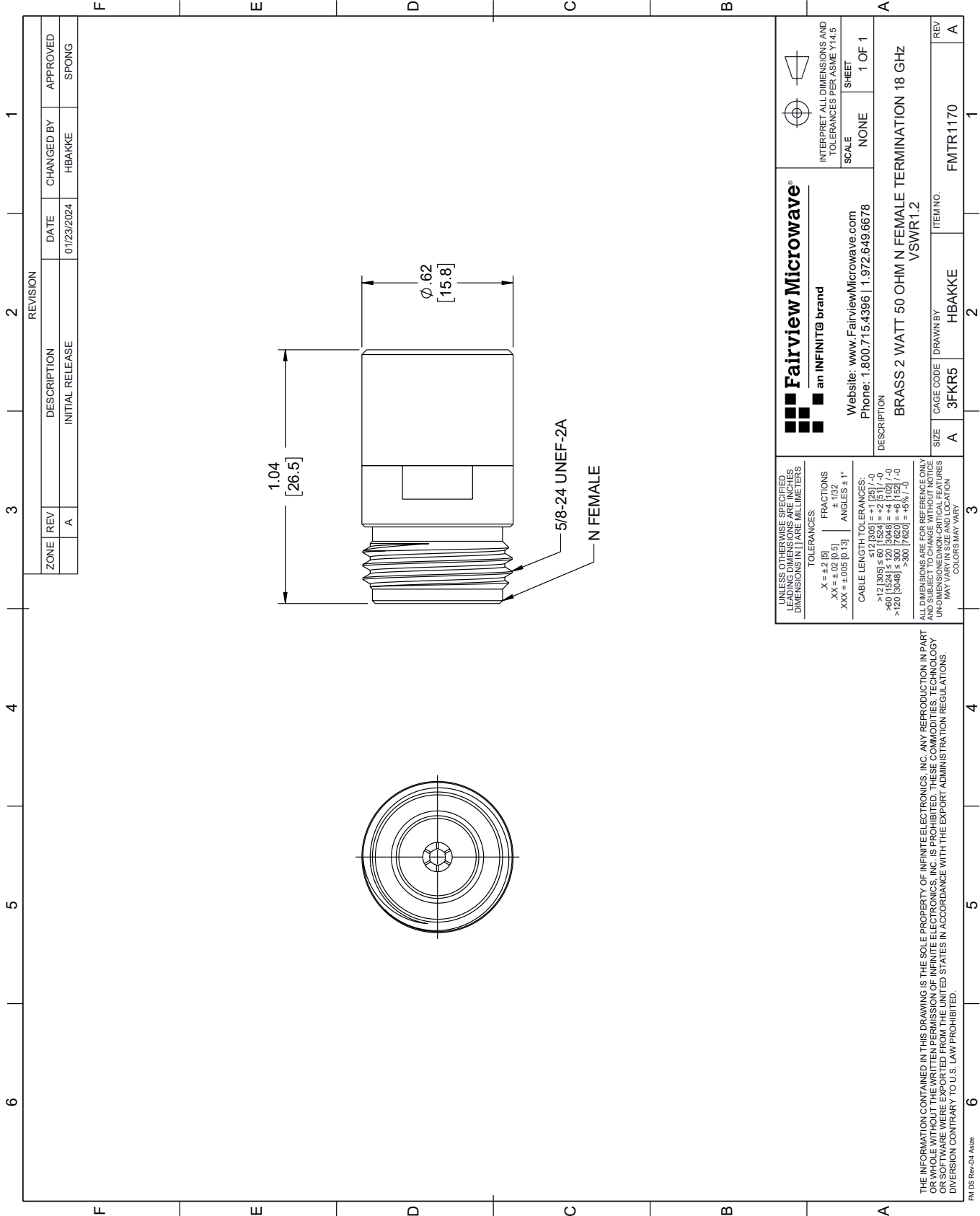
For additional information on this product, please click the following link: [N-Type Female \(Jack\) Termination \(Load\) 2 Watts, DC to 18 GHz, Brass FMTR1170](#)

URL: <https://www.fairviewmicrowave.com/rf-load-2-watts-18-ghz-n-female-fmtr1170-p.aspx>

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# FMTR1170 CAD Drawing

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| REVISION |     | DATE            | CHANGED BY | APPROVED   |          |
|----------|-----|-----------------|------------|------------|----------|
| ZONE     | REV | DESCRIPTION     | DATE       | CHANGED BY | APPROVED |
|          | A   | INITIAL RELEASE | 01/23/2024 | HBAKKE     | SPONG    |

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an INFINIT® brand

Website: [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com)  
Phone: 1.800.715.4396 | 1.972.649.6678

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5  
SCALE: NONE SHEET: 1 OF 1

DESCRIPTION: BRASS 2 WATT 50 OHM N FEMALE TERMINATION 18 GHZ VSWR1.2

|      |           |          |          |
|------|-----------|----------|----------|
| SIZE | CAGE CODE | DRAWN BY | ITEM NO. |
| A    | 3FKR5     | HBAKKE   | FMTR1170 |

REV: A

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND DIMENSIONS IN [ ] ARE MILLIMETERS.

TOLERANCES:  
 .X = ±.2 [5] FRACTIONS ± 1/32  
 .XX = ±.02 [0.5] ANGLES ± 1°  
 .XXX = ±.005 [0.13]

CABLE LENGTH TOLERANCES:  
 <12 [305] ±.60 [15.24] = ±.2 [5] / -0  
 >12 [305] ≤ 60 [1524] = ±.2 [5] / -0  
 >60 [1524] ≤ 120 [3048] = ±.4 [10.2] / -0  
 >120 [3048] ≤ 300 [7620] = ±.6 [15.2] / -0  
 >300 [7620] = ±.6 [15.2] / 0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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FM DS Rev-D4 Alt2b