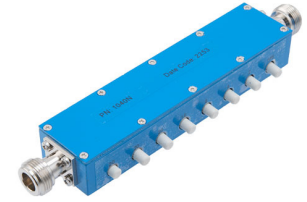


0 to 90 dB Step Attenuator 50 Ohm N Female
To 50 Ohm N Female With 1 dB Step Rated To
2 Watts Up To 1 GHz in a Push Button design



FMAT1040N

Features

- 1, 2, 4, 8, 16, 20, 20, and 20 dB step buttons
- 0 to 90 dB Attenuation
- 3% Attenuation Accuracy Maximum
- Female Connectors
- Maximum Power 2 Watts (CW)

Applications

- Instrumentation
- Precision Measurements
- Prototyping and Characterization
- Production Systems

Description

The FMAT1040N is a Step Attenuator that has 90 dB of total attenuation with 1, 2, 4, 8, 16, 20, 20, and 20 dB push button steps, designed across the frequency range of DC to 1 GHz. Select button for desired attenuation level, total attenuation is the sum of all buttons selected. The design is tried and true technology that offers exceptional performance characteristics that include 2 dB maximum insertion loss, and a maximum VSWR of 1.4:1. The design also features excellent attenuation accuracy with 3% maximum. The Nickel plated Brass package has N Female connectors, and operates within the temperature range of -20°C to 85°C.

Electrical Specifications

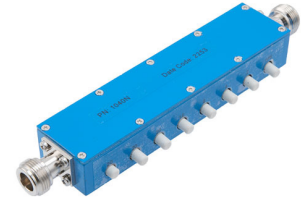
| Description | Minimum | Typical | Maximum | Units |
|---|---------|---|---------|-------|
| Frequency Range | DC | | 1,000 | MHz |
| Impedance | | 50 | | Ohms |
| Insertion Loss | | | 2 | dB |
| Attenuation Value | | 0 to 90 | | dB |
| Step Size | | 1 | | dB |
| Step Type | | Push Button | | |
| Accuracy Statement | | ±0.8dB (<50dB Atten) ±3%dB (>50dB Atten) | | |
| Input Power (CW) | | | 2 | Watts |
| Input Power, Peak 5 μs pulse width 2% duty cycle | | | 100 | Watts |
| VSWR | | | 1.4:1 | |

Mechanical Specifications

Size

| | |
|---------------------------|---------------------|
| Length | 6.378 in [162 mm] |
| Width | 0.787 in [19.99 mm] |
| Height | 1.398 in [35.51 mm] |
| Weight | 0.21 lbs [95.25 g] |
| Body Material and Plating | Aluminum, Paint |

0 to 90 dB Step Attenuator 50 Ohm N Female To 50 Ohm N Female With 1 dB Step Rated To 2 Watts Up To 1 GHz in a Push Button design



FMAT1040N

Connectors

| Description | Connector 1 | Connector 2 |
|------------------------------|------------------------|------------------------|
| Type | N Female | N Female |
| Contact Material and Plating | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Body Material and Plating | Brass, Nickel | Brass, Nickel |

Environmental Specifications

Temperature

Operating Range -20 to 85 deg C

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

Plotted and Other Data

Notes:

0 to 90 dB Step Attenuator 50 Ohm N Female To 50 Ohm N Female With 1 dB Step Rated To 2 Watts Up To 1 GHz in a Push Button design 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: [0 to 90 dB Step Attenuator 50 Ohm N Female To 50 Ohm N Female With 1 dB Step Rated To 2 Watts Up To 1 GHz in a Push Button design FMAT1040N](#)

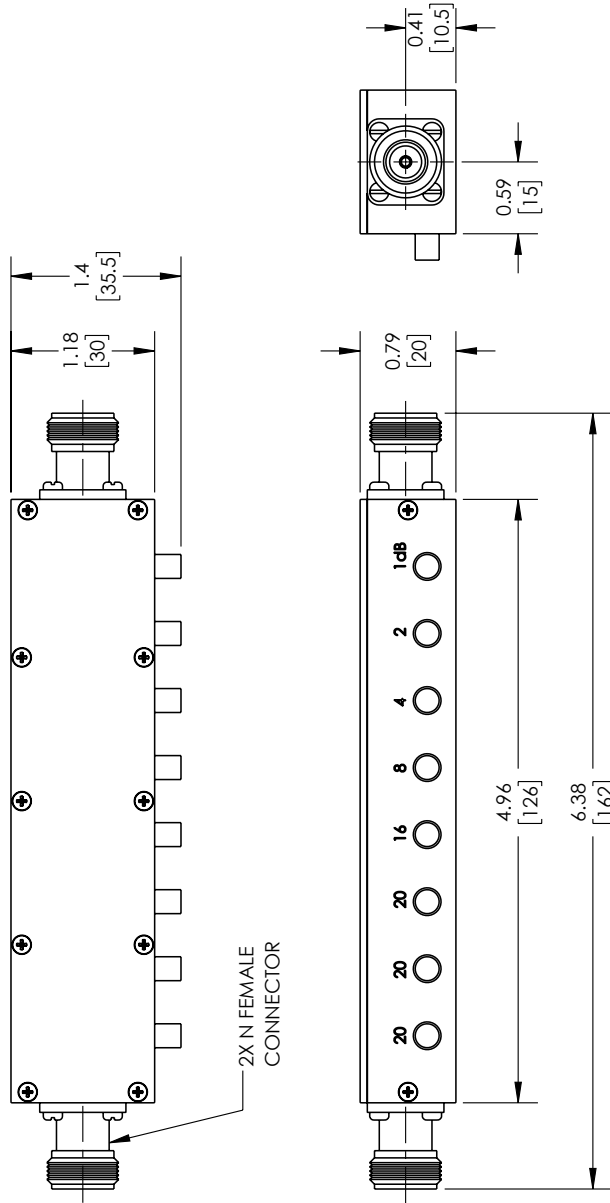
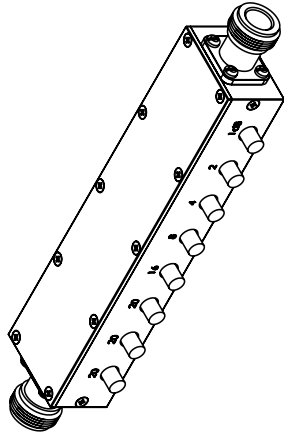
URL: <https://www.fairviewmicrowave.com/90db-step-attenuator-1db-n-female-dc-1-ghz-2-watts-fmat1040n-p.aspx>

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume liability arising out of the use of any part or document.

FMAT1040N CAD Drawing

0 to 90 dB Step Attenuator 50 Ohm N Female To 50 Ohm N Female With 1 dB Step Rated To 2 Watts Up To 1 GHz in a Push Button design

| REVISIONS | | |
|-----------|-----------------|----------|
| REV. | DESCRIPTION | DATE |
| A | INITIAL RELEASE | 12/28/22 |
| | | APPROVED |
| | | SPONG |



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TITLE

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

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

TOLERANCES:

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

FRACTIONS

X ± .2 [5.08]

XX ± .01 [0.25]

XXX ± .005 [0.13]

ANGLES ± 1°

SCALE N/A

| SIZE | CAGE CODE | DRAWN BY | ITEM NO. | REV. |
|------|-----------|-----------|-----------|------|
| A | 3FKR5 | VTHANGARA | FMAT1040N | A |