

**SMA Female 2x Frequency Multiplier with 8 GHz to 18 GHz Output and 10 dB Conversion Loss**

Fairview Microwave's FMDB1002 is a frequency multiplier with a multiplication factor of 2, also known as a frequency doubler. This frequency doubler covers a wide output frequency range of 8 GHz to 18 GHz. Typical performance of this frequency multiplier includes 10 dB conversion loss. The FMDB1002 frequency multiplier also provides 23 dB minimum fundamental isolation.

**Electrical Specifications** (TA= 25°C)

Description	Min	Typ	Max	Units
Input Frequency Range	4		9	GHz
Output Frequency Range	8		18	GHz
Impedance		50		Ohms
Input Power (CW)	+10		+13	dBm
Conversion Loss		10	12	dB

**Electrical Specification Notes:**

Values at 25°C, sea level.

Fundamental isolation referenced to input signal.

**Mechanical Specifications**

**Size**

Length 1.55 in [39.37 mm]  
 Width 0.31 in [7.87 mm]  
 Height 0.59 in [14.99 mm]  
 Weight 1 lbs [453.59 g]

Body Material and Plating Passivated Stainless Steel  
 Package Type Connectorized  
 Output Connector SMA Female

**Environmental Specifications**

**Temperature**

Operating Range -55 to +125 deg C  
 Storage Range -65 to +150 deg C

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

**Plotted and Other Data**

Notes:



**Features:**

- x2 Frequency Multiplier
- Wide Frequency Band
- Low Conversion Loss

**Applications:**

- Electronic Warfare
- Point-to-Point Radio
- Point-to-Multipoint Radio
- VSAT Radios
- Space Systems
- Test Instrumentation
- Telecommunications

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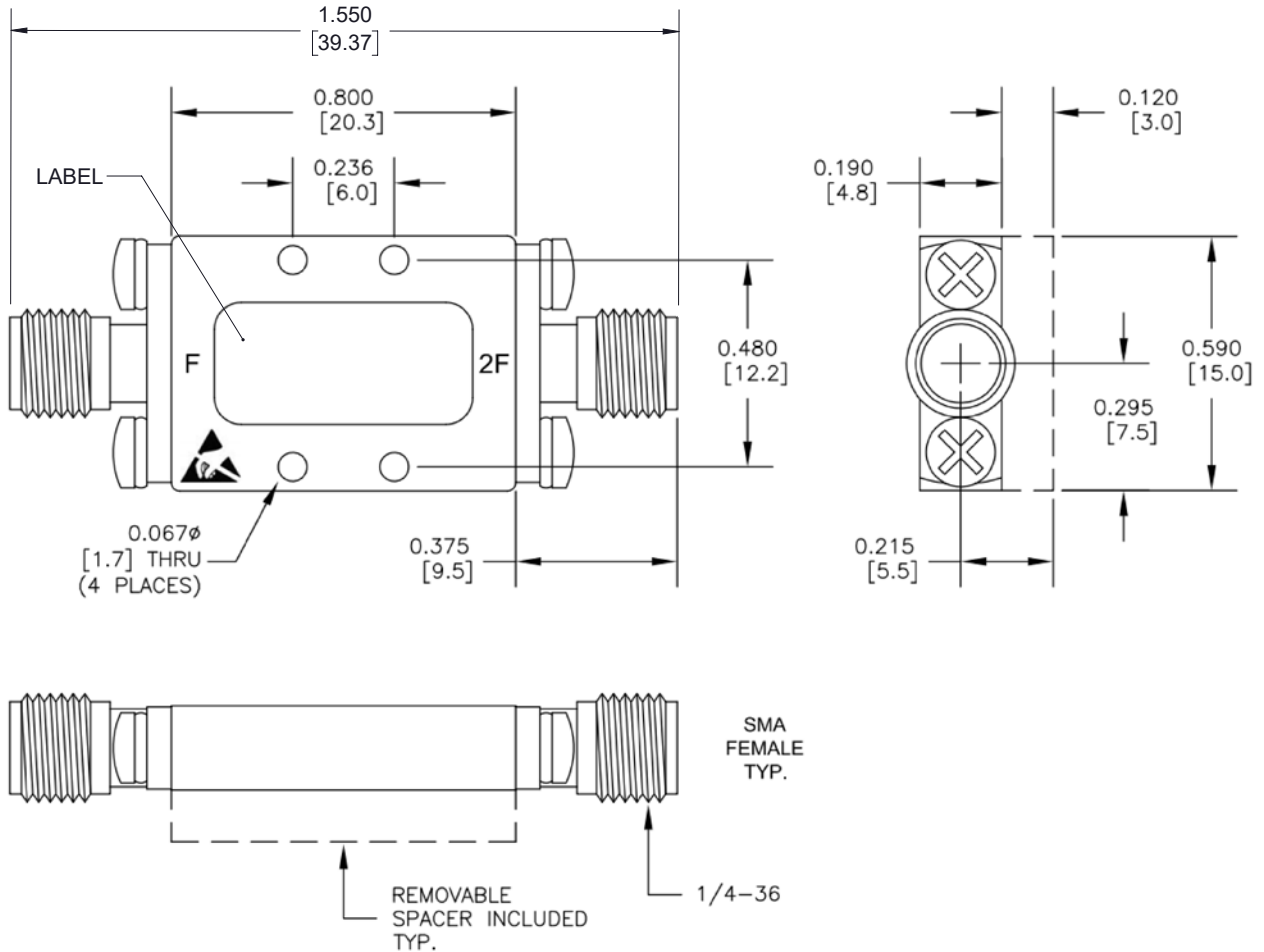
SMA Female 2x Frequency Multiplier with 8 GHz to 18 GHz Output and 10 dB Conversion Loss from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMA Female 2x Frequency Multiplier with 8 GHz to 18 GHz Output and 10 dB Conversion Loss FMDB1002](#)

URL: <https://www.fairviewmicrowave.com/sma-2x-frequency-multiplier-18-ghz-10-db-fmdb1002-p.aspx>

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LABEL



**STANDARD TOLERANCES**

- .X ±0.2
- .XX ±0.01
- .XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



- NOTES:  
 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  
 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
 3. DIMENSIONS ARE IN INCHES [mm].

TITLE SMA Female 2x Frequency Multiplier with 8 GHz to 18 GHz Output and 10 dB Conversion Loss	DWG NO FMDB1002		CAGE CODE 3FKR5			
	CAD FILE 05/24/18	SHEET 1 OF 1	SCALE N/A	SIZE A	7361	