

WR-42 Lowpass Waveguide Filter With a 20.2 GHz to 21.2 GHz Pass Band

The FMW42F013 is a WR-42 lowpass filter with UG Cover and UG Grooved Flanges. The pass band is 1000 MHz, or 20.2 to 21.2 GHz. Implementing a waveguide design, the filter has excellent rejection of 110 dB minimum at 43.5 to 45.5 GHz, or about 22.3 GHz from the band edge. It has a maximum insertion loss of 0.5 dB.

Electrical Specifications (Values at 25°C, sea level)

Description	Min	Typ	Max	Units
Passband Frequency Range	20.2	-	21.2	GHz
Insertion Loss			0.5	dB
Passband VSWR			1.35:1	
Input Power			100	Watts
Peak Power			1	kWatts
H-band Rejection at 43.5 GHz			110	dB

Mechanical Specifications

Size

Length	2.76 in [70.1 mm]
Width	0.88 in [22.35 mm]
Height	0.88 in [22.35 mm]
Weight	0.1 lbs [45.36 g]

Flange 1

Waveguide Size	WR-42
Flange Material and Plating	Aluminum, Silver
Flange 1 Type	UG Cover

Flange 2

Waveguide Size	WR-42
Flange Material and Plating	Aluminum, Silver
Flange 2 Type	UG Grooved

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

Plotted and Other Data

Notes:

- Values at 25 °C, sea level



Configuration:

- Passband: Low Pass
- Flange 1: WR-42
- Flange 2: WR-42

Features:

- Passband of 1000MHz
- 20.2 GHz to 21.2 GHz Passband
- WR-42 UG Cover and UG Grooved Flanges
- Min rejection 110 dB at 43.5 to 45.5 GHz
- Maximum Insertion Loss of 0.5 dB
- Max Power (CW) 100 Watts

Applications:

- Radar Systems
- Test and Measurement
- Satellite Communications
- Instrumentation
- Automotive Radar Systems

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WR-42 Lowpass Waveguide Filter With a 20.2 GHz to 21.2 GHz Pass 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 Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-42 Lowpass Waveguide Filter With a 20.2 GHz to 21.2 GHz Pass Band FMW42F013](#)

URL: <https://www.fairviewmicrowave.com/wr-42-lowpass-waveguide-filter-ug-pass-band-fmw42f013-p.aspx>

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