



## Highpass Waveguide Filter With WR-42 Interface Operating from 20 GHz to 26.7 GHz

### TECHNICAL DATA SHEET

**PE-W42F012**

#### Features

- Passband of 6700 MHz
- 20 GHz to 26.7 GHz Passband
- WR-42 UG Cover Flanges

- Min rejection 50 dB at 17 GHz
- Maximum Insertion Loss of 0.3 dB
- Max Power (CW) 100 Watts

#### Applications

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

#### Description

The PE-W42F012 is a WR-42 highpass filter with UG Cover Flanges. The pass band is 6700 MHz, or 20 to 26.7 GHz. Implementing a waveguide design, the filter has excellent rejection of 50 dB minimum at 17 GHz, or about 3000 MHz from the band edge. It has a maximum insertion loss of 0.3 dB.

#### Configuration

High Passband  
Flange 1  
Flange 2

High Pass  
WR-42  
WR-42

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

Description	Minimum	Typical	Maximum	Units
High Passband Frequency Range	20	-	26.7	GHz
Insertion Loss			0.3	dB
High Passband VSWR			1.25:1	
Input Power			100	Watts
Peak Power			3	kWatts
Lowband Rejection at 17 GHz	50			dB

#### Mechanical Specifications

##### Size

Length 2.95 in [74.93 mm]  
Width 0.88 in [22.35 mm]  
Height 0.88 in [22.35 mm]  
Weight 0.055 lbs [24.95 g]

##### Flange 1

Waveguide Size WR-42  
Flange Material and Plating Aluminum, Silver

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Highpass Waveguide Filter With WR-42 Interface Operating from 20 GHz to 26.7 GHz PE-W42F012](#)



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Flange 1 Type

#### **Flange 2**

Waveguide Size

Flange Material and Plating

Flange 2 Type

UG Cover

WR-42

Aluminum, Silver

UG Cover

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

#### Plotted and Other Data

Notes:

- Values at 25 °C, sea level

Highpass Waveguide Filter With WR-42 Interface Operating from 20 GHz to 26.7 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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URL: <https://www.pasternack.com/wr-42-highpass-waveguide-filter-ug-pass-band-pe-w42f012-p.aspx>

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# PE-W42F012 CAD Drawing

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