



Lowpass Waveguide Filter With WR-42 Interface Operating from 20.2 GHz to 21.2 GHz

TECHNICAL DATA SHEET

PE-W42F013

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

Description

The PE-W42F013 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.

Configuration

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

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

Description	Minimum	Typical	Maximum	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
Highband 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	0.095 lbs [43.09 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: [Lowpass Waveguide Filter With WR-42 Interface Operating from 20.2 GHz to 21.2 GHz PE-W42F013](#)



Lowpass Waveguide Filter With WR-42 Interface
Operating from 20.2 GHz to 21.2 GHz

TECHNICAL DATA SHEET

PE-W42F013

Flange 1 Type

UG Cover

Flange 2

Waveguide Size

Flange Material and Plating

Flange 2 Type

WR-42

Aluminum, Silver

UG Grooved

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

Plotted and Other Data

Notes:

- Values at 25 °C, sea level

Lowpass Waveguide Filter With WR-42 Interface Operating from 20.2 GHz to 21.2 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.

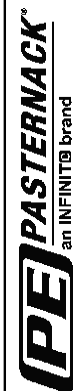
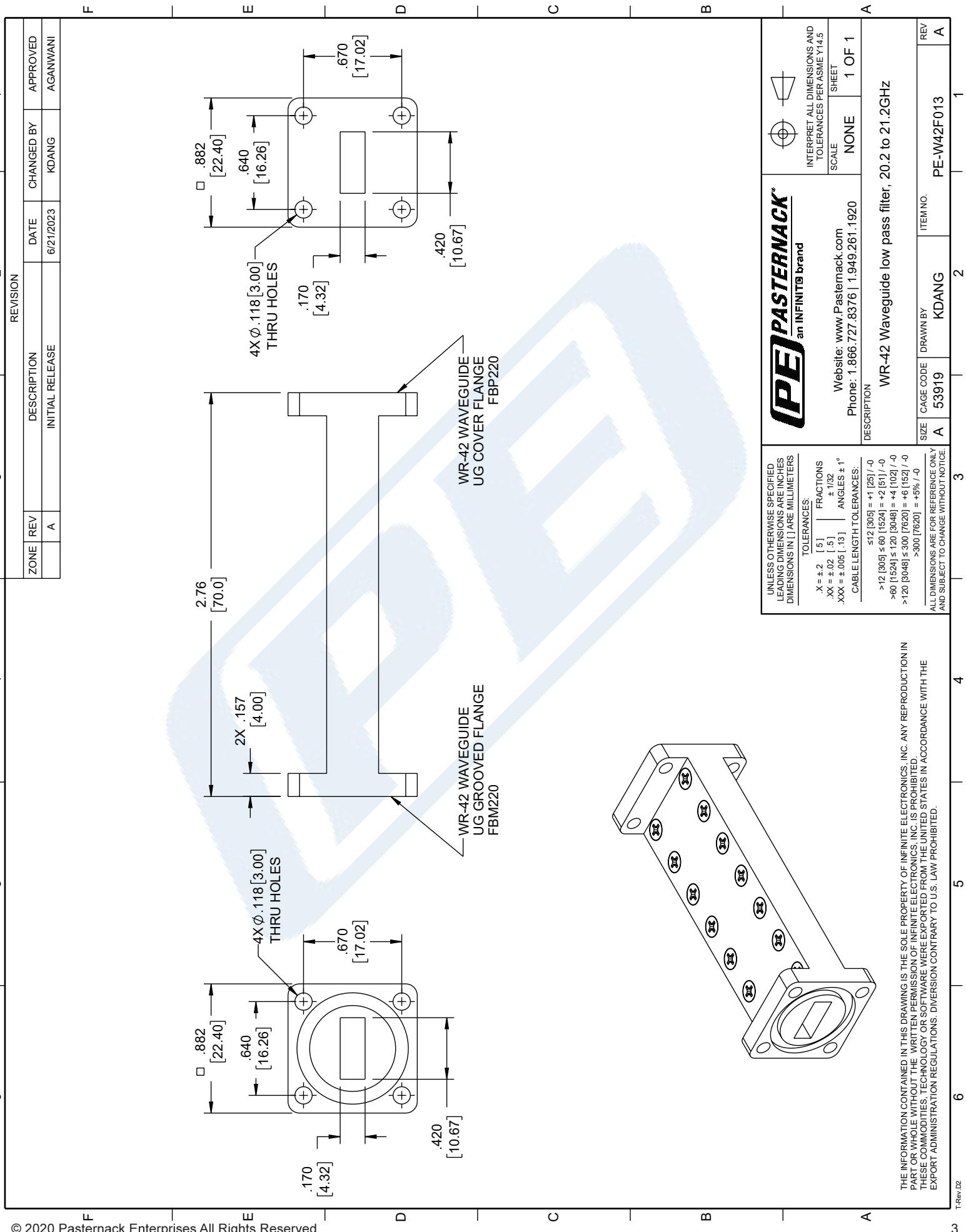
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Lowpass Waveguide Filter With WR-42 Interface Operating from 20.2 GHz to 21.2 GHz PE-W42F013](#)

URL: <https://www.pasternack.com/wr-42-lowpass-waveguide-filter-ug-pass-band-pe-w42f013-p.aspx>

The information contained in 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. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

PE-W42F013 CAD Drawing

Lowpass Waveguide Filter With WR-42 Interface Operating from 20.2 GHz to 21.2 GHz



Website: www.Pasternack.com
Phone: 1.866.727.8376 | 1.949.261.1920

DESCRIPTION

WR-42 Waveguide low pass filter, 20.2 to 21.2GHz

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SHEET 1 OF 1

SCALE NONE

REV A

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.