



WR-22 Waveguide Dual Polarized Horn Antenna, 33 GHz to 50 GHz Frequency Range, 15 dBi Gain, UG-383/U Flange

Waveguide Antennas Technical Data Sheet

PEWAN1140

Features

- Full Q Band Operations
- Linear and Circular Polarizations
- High Port Isolation
- High Cross Polarization Rejection

Applications

- Radar Systems
- Communication Systems
- Circular and Waveform Separation and Combination

Description

Pasternack's PEWAN1140 is a full band, dual polarized, WR-22 horn antenna assembly that operates in the frequency range of 33 GHz to 50 GHz. The antenna features an integrated orthomode transducer that provides high port isolation. PEWAN1139 supports either vertical or horizontal polarized waveguide forms with a typical 35 dB cross polarization rejection, 15 dBi nominal gain at center frequency, typical 45 dB port isolation between the horizontal and vertical ports, typical half power beamwidth of 28 degrees on the E-plane, typical half power beamwidth of 33 degrees on the H-plane, and -15 dB sidelobe levels. The input of this antenna is a WR-22 waveguide with UG-383/U flange.

Configuration

Design WR-22 Dual Polarized Horn
Polarization Linear/Circular

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	33		50	GHz
Nominal Gain		15		dBi
Horizontal Half Power Beam Width		33		Degrees
Vertical Half Power Beam Width		28		Degrees
VSWR		1.4:1		
V and H Port Isolation		45		dB
Cross Polarization Rejection		35		dB

Mechanical Specifications

Size

Length 2.03 in [51.56 mm]
Width 0.8 in [20.32 mm]
Height 0.8 in [20.32 mm]
Weight 0.15 lbs [68.04 g]

Waveguide Interface

Waveguide Size WR-22

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-22 Waveguide Dual Polarized Horn Antenna, 33 GHz to 50 GHz Frequency Range, 15 dBi Gain, UG-383/U Flange PEWAN1140](#)



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Flange Type
Flange Designation
Body Material and Plating

Square Cover
UG-383/U
Aluminum, Gold

Environmental Specifications

Temperature

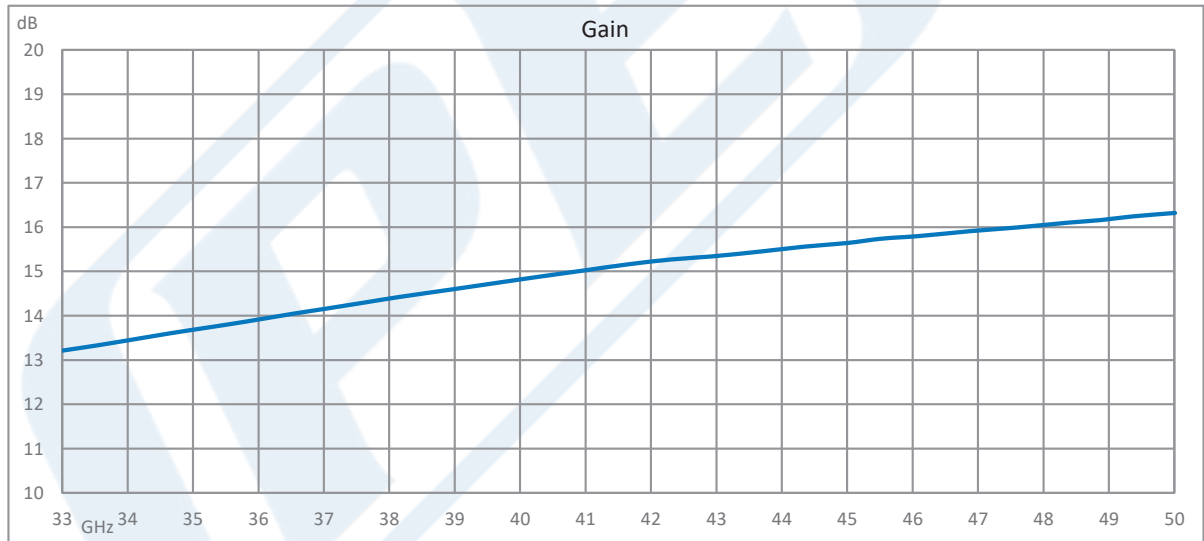
Operating Range

-40 to 85 deg C

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

Plotted and Other Data

Typical Performance Data



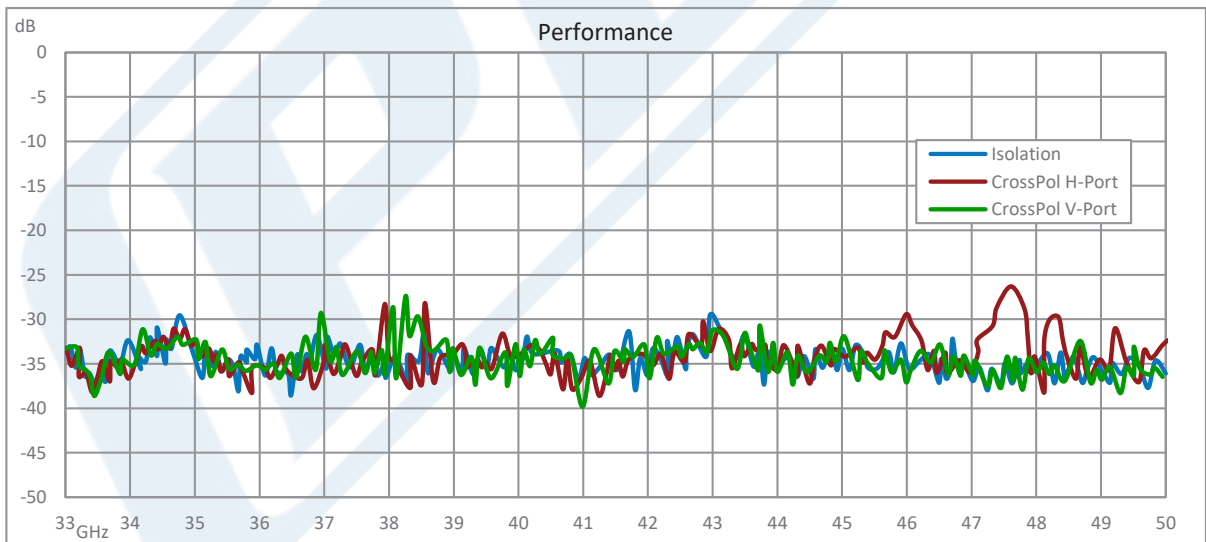
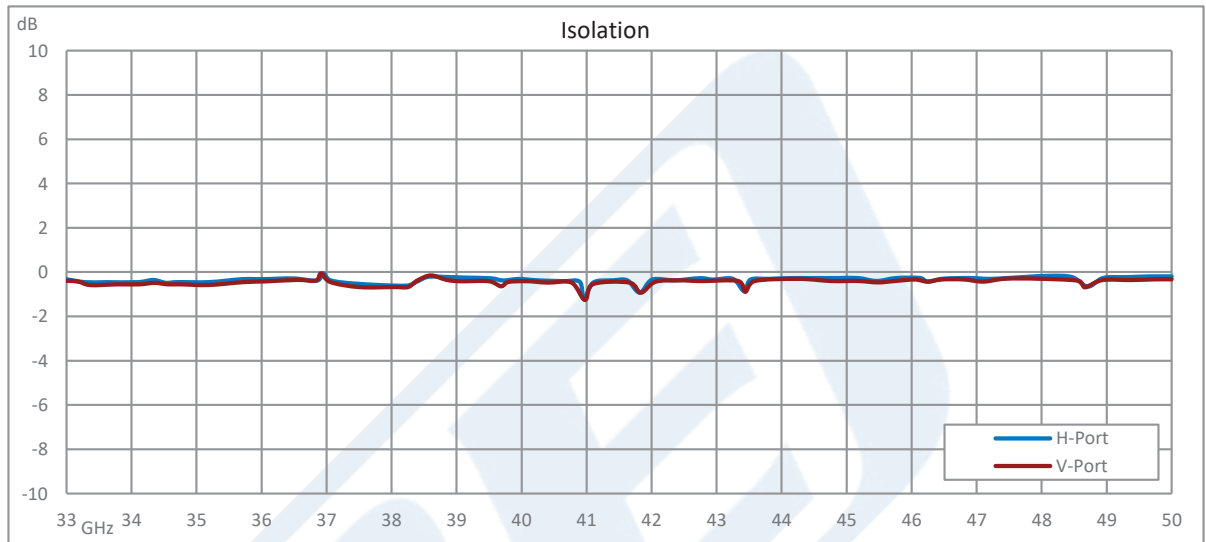
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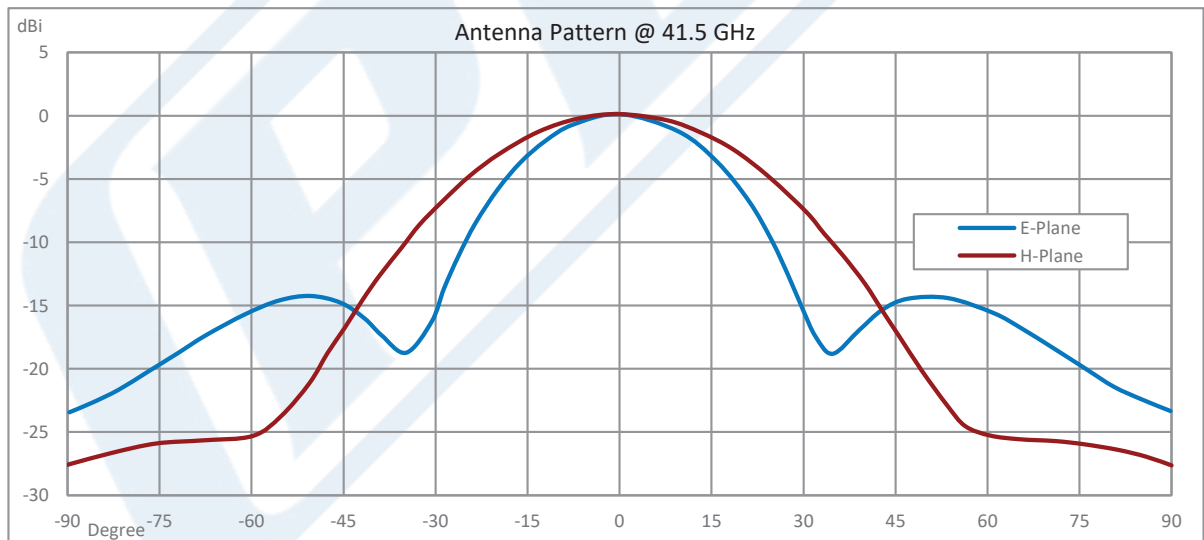
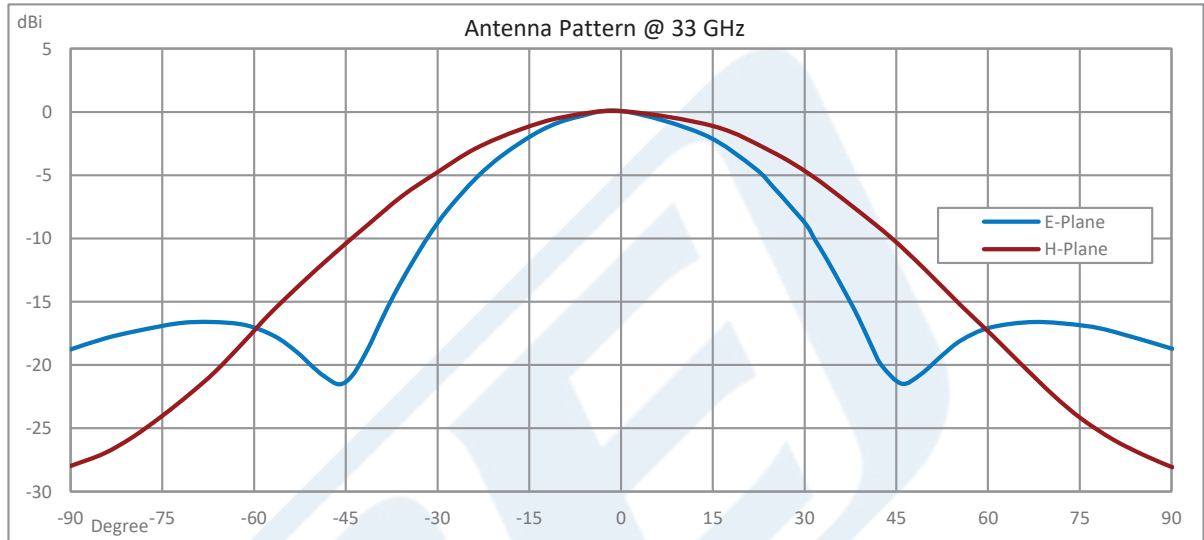
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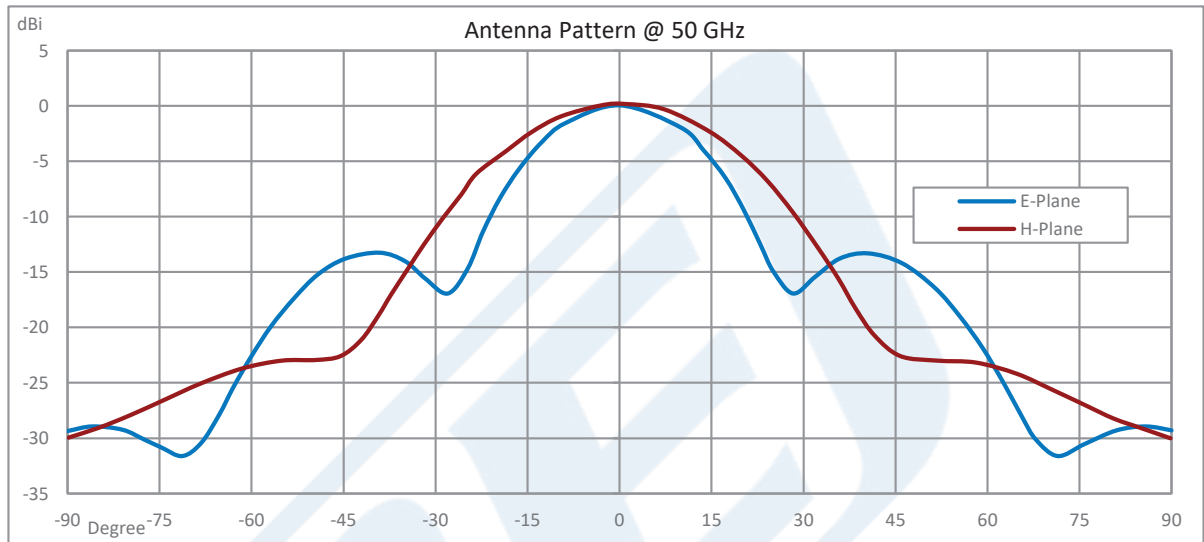
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URL: <https://www.pasternack.com/wr-22-waveguide-gain-horn-antenna-15dbi-ug-383-square-flange-pewan1140-p.aspx>

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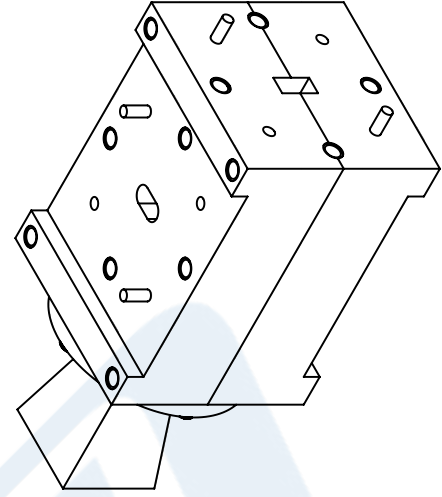
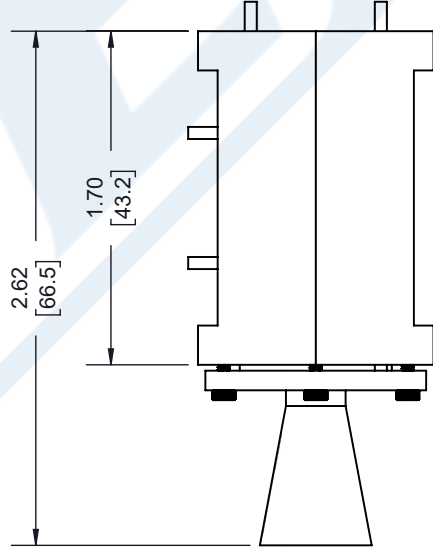
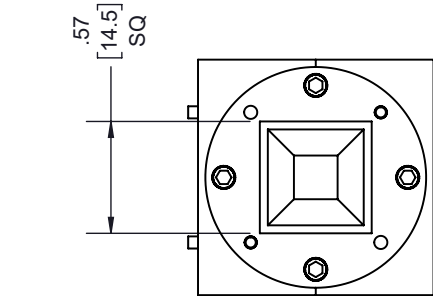
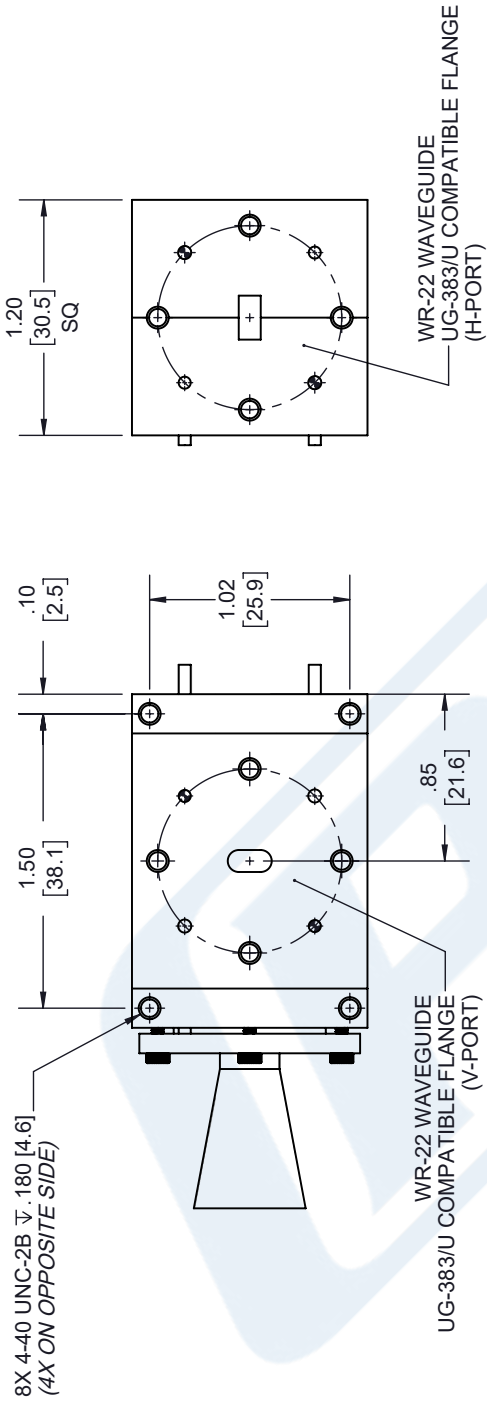
PEWAN1140 CAD Drawing

WR-22 Waveguide Dual Polarized Horn Antenna, 33 GHz to 50 GHz
 Frequency Range, 15 dBi Gain, UG-383/U Flange

REVISIONS

REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	08/16/19	M.MILLER

PASTERNAK
 PEWAN1140
 D/C: YYWW



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

TOLERANCES:
 X \pm 2 [5.08] FRACTIONS
 XX \pm 01 [25] \pm 1/32
 XXX \pm .005 [13] ANGLES \pm 1 $^\circ$

ALL DIMENSIONS SHOWN
 ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1
 SCALE N/A

SIZE A CAGE NUMBER 53919 DRAWN BY K.DANG PART NUMBER PEWAN1140 REV A

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