PASTERNACK®
THE ENGINEER'S RF SOURCE



Waveguide Mixer Up Converter WR-12 From 60 GHz to 90 GHz, IF From DC to 18 GHz And LO Power of +13 dBm, UG-387/U Flange, E Band

Waveguide Converters - PE13U1001

Features

- E Band (60 to 90 GHz) full waveguide up converter
- Broad IF Frequency Range: DC to 18 GHz
- LO Drive level: +13 dBm nominal
- RF & LO Ports: WR-12 with UG-387/U-MOD Flange
- Double Balanced design
- Low Capacitance GaAs Schottky Beam Lead diodes
- Gold Plated Compact Package Design
- Operating Temperature: 0°C to +50°C

Applications

- Transmitter Subsystems
- Military Communications
- Commercial Communications
- Instruments and Test Equipment

Description

The PE13U1001 is a full waveguide band up converter mixer with an LO and RF frequency range of 60 to 90 GHz (E Band). The IF frequency range is DC to 18 GHz with a nominal LO drive level of +13 dBm. The double balanced circuit design utilizes high performance GaAs Schottky beam lead diodes. Conversion loss is 8.5 dB typical and flat across the entire frequency band. The gold plated compact package design uses integrated WR-12 with UG-387/U-MOD waveguide flange interfaces for the RF and LO ports and a female SMA connector for the IF port.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	60		90	GHz
LO Frequency Range	60		90	GHz
IF Frequency Range	DC		18	GHz
Conversion Loss		8.5		dB
LO Port Power		13	15	dBm

Mechanical Specifications

Size

Length	1.4 in [35.56 mm]
Width	0.75 in [19.05 mm]
Height	0.75 in [19.05 mm]
Weight	0.0625 lbs [28.35 g]

Configuration

Design	Mixer Up Converter

Description	RF Port	LO Port	IF Port
Type	WR-12 UG-387/U	WR-12 UG-387/U	SMA Female

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: Waveguide Mixer Up Converter WR-12 From 60 GHz to 90 GHz, IF From DC to 18 GHz And LO Power of +13 dBm, UG-387/U Flange, E Band PE13U1001

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
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Environmental Specifications

Temperature

Operating Range	0 to +50 deg C



Compliance Certifications (visit www.Pasternack.com for current document)

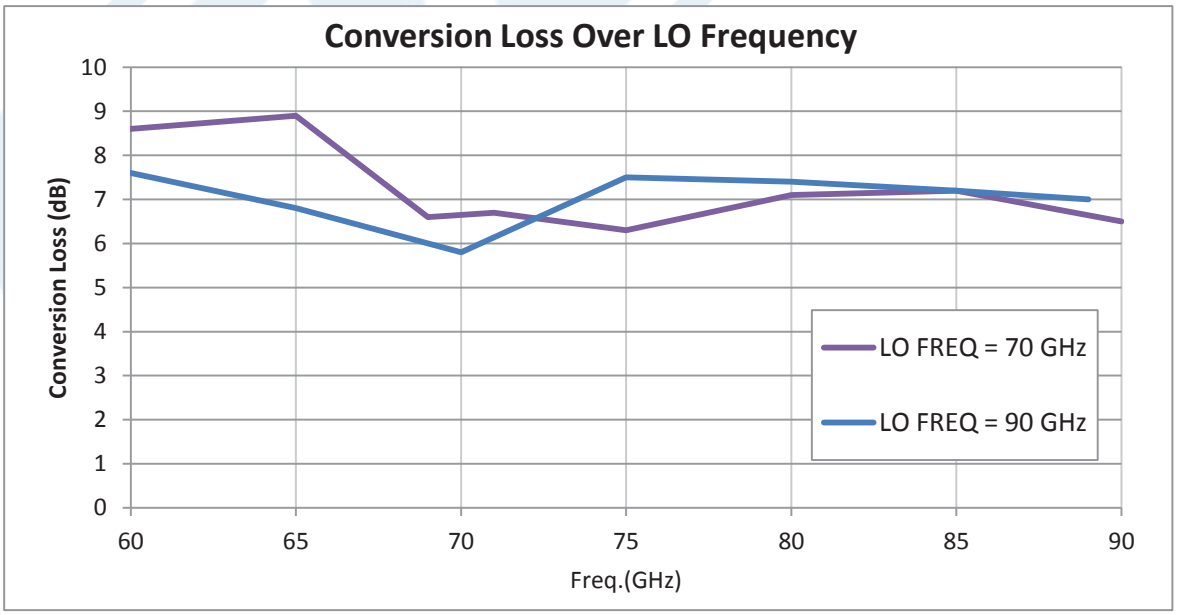
Not RoHS Compliant

Plotted and Other Data

Notes:

Typical Performance Data

erGraph



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Waveguide Mixer Up Converter WR-12 From 60 GHz to 90 GHz, IF From DC to 18 GHz And LO Power of +13 dBm, UG-387/U Flange, E Band from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

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URL: http://www.pasternack.com/waveguide-mixer-up-converter-wr-12-60-90-ghz-if-18-ghz-pe13u1001-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.

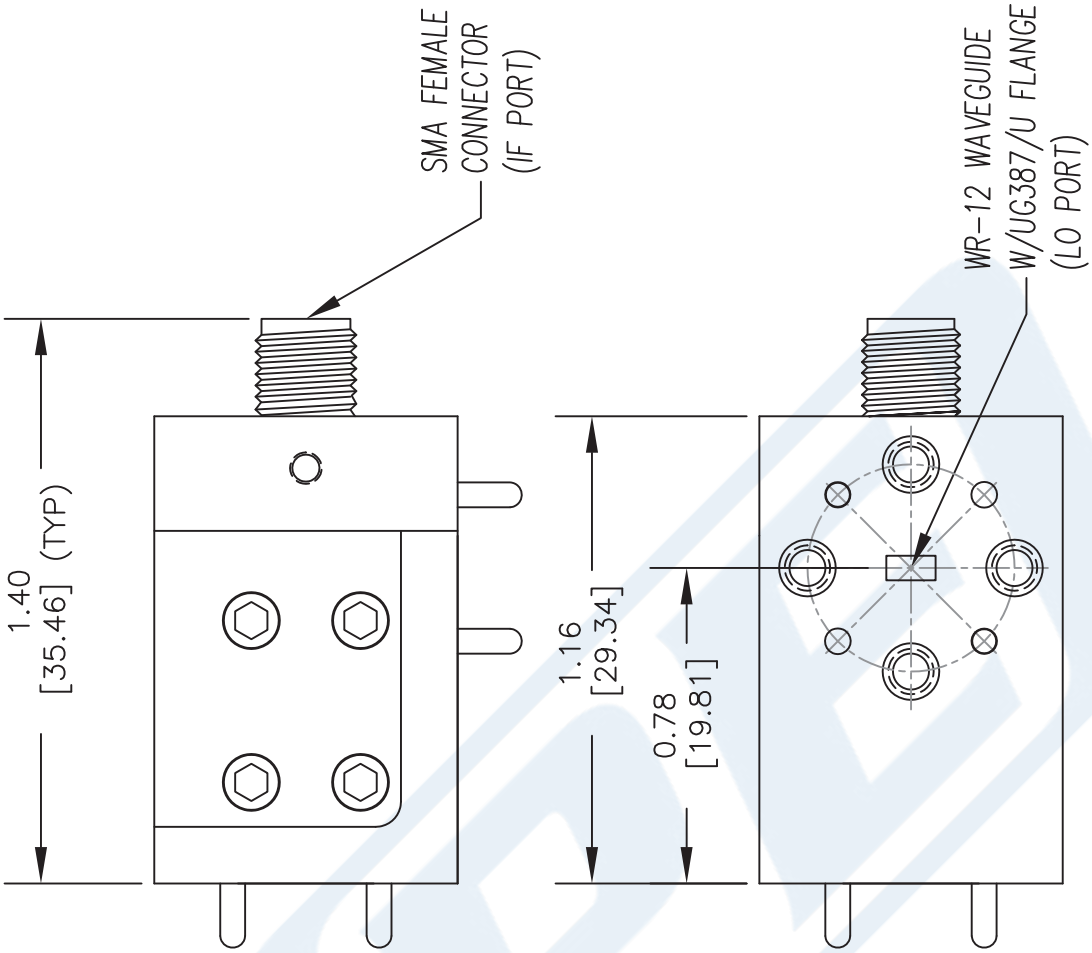
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PE13U1001 CAD Drawing

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UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN: inches
TOLERANCES ARE: [mm]
.XX ± .01 [±.25]
.XX ±.001 [±.025]

* THESE DIMENSIONS AND TOLERANCES SUPERSEDE NOTE #1 ON TITLE BLOCK.

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].

DWG TITLE: PE13U1001

CAD FILE 072015 | SCALE N/A | SIZE A | 2233

FSCM NO. 53919

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