



## WR-12 PIN Diode SPDT Waveguide Switch Operating From 60 GHz to 90 GHz E Band With UG-387/U Flange

### Waveguide PIN Diode Switches Technical Data

PE71S9002

#### Features

- SPDT Reflective Switch
- 60 GHz to 90 GHz
- E Band
- Insertion Loss 4.5 dB typ
- Isolation 20 dB min

#### Applications

- Test & Measurement
- Military Communication
- Commercial Communication
- Military Electronic Systems
- RF Test Stations

#### Description

The PE71S9002 is a Single Pole Double Throw (SPDT) Reflective PIN Diode Switch designed to operate over the 60 GHz to 90 GHz Frequency Range. Electrical performance includes 4.5 dB typ insertion loss, 20 dB min isolation, and 300 nsec max switching speed. The design incorporates TTL-compatible driver circuitry for accurate logic control and dual voltage controls of +5 Vdc and -5 Vdc are required. The package interface uses solder terminals and SMA Female control connector and WR-12 Round Cover UG-387/U Flange.

#### Electrical Specifications

Design

SPDT, Reflective

RF Characteristics (TA = +25°C, Vdc1=5V/20mA, Vdc2=-5V/20mA)

Description	Minimum	Typical	Maximum	Units
Frequency Range	60		90	GHz
Insertion Loss		4.5	6	dB
Isolation	20			dB
Switching Time			300	ns
Voltage Supply 1		5		V
Voltage Supply 2		-5		V
Current @5 V		20		mA
Current @-5 V		20		mA

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-12 PIN Diode SPDT Waveguide Switch Operating From 60 GHz to 90 GHz E Band With UG-387/U Flange PE71S9002](#)



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#### Mechanical Specifications

##### Size

Length	2.83 in [71.88 mm]
Width	1.2 in [30.48 mm]
Height	0.75 in [19.05 mm]
Weight	0.205 lbs [92.99 g]

##### Configuration

Control Connector	SMA Female
Waveguide Size	WR-12
Flange Type	UG-387/U

#### Environmental Specifications

#### Compliance Certifications (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

Not RoHS Compliant	
REACH Compliant	12/17/2015

#### Plotted and Other Data

Notes:

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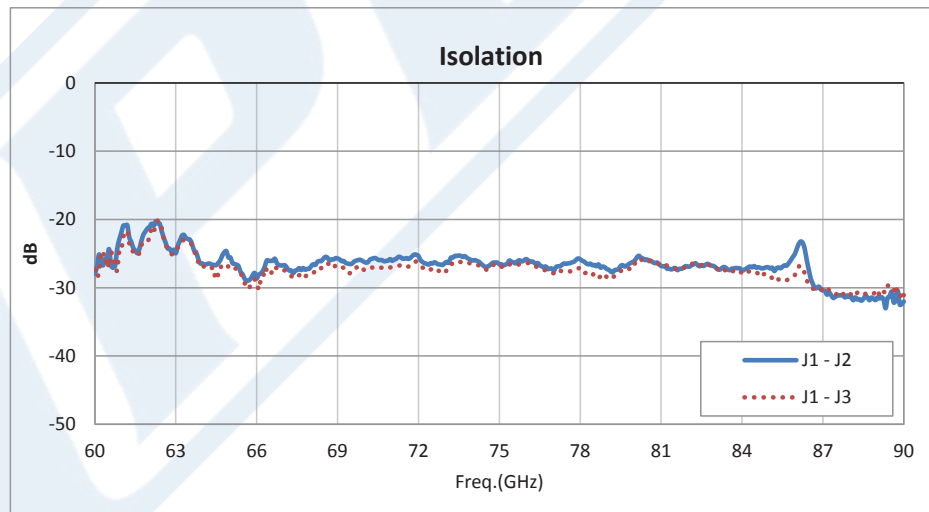
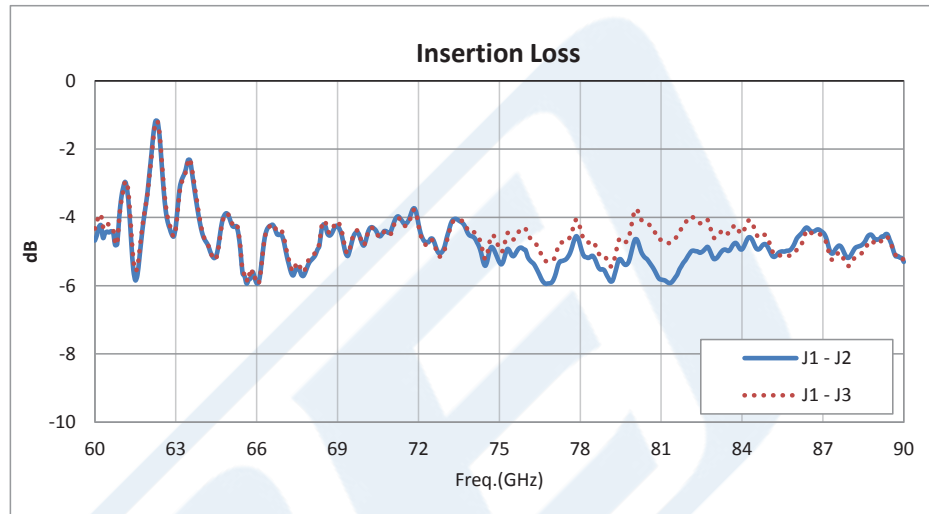


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Typical Performance Data



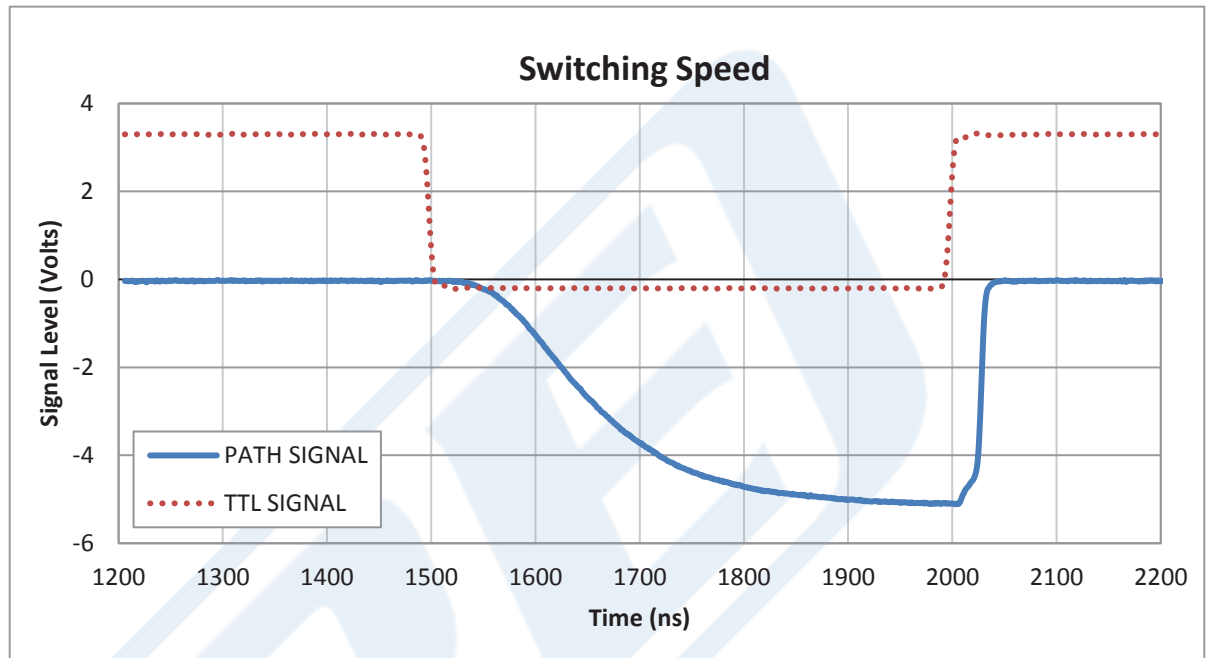
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WR-12 PIN Diode SPDT Waveguide Switch Operating From 60 GHz to 90 GHz E Band With UG-387/U Flange from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

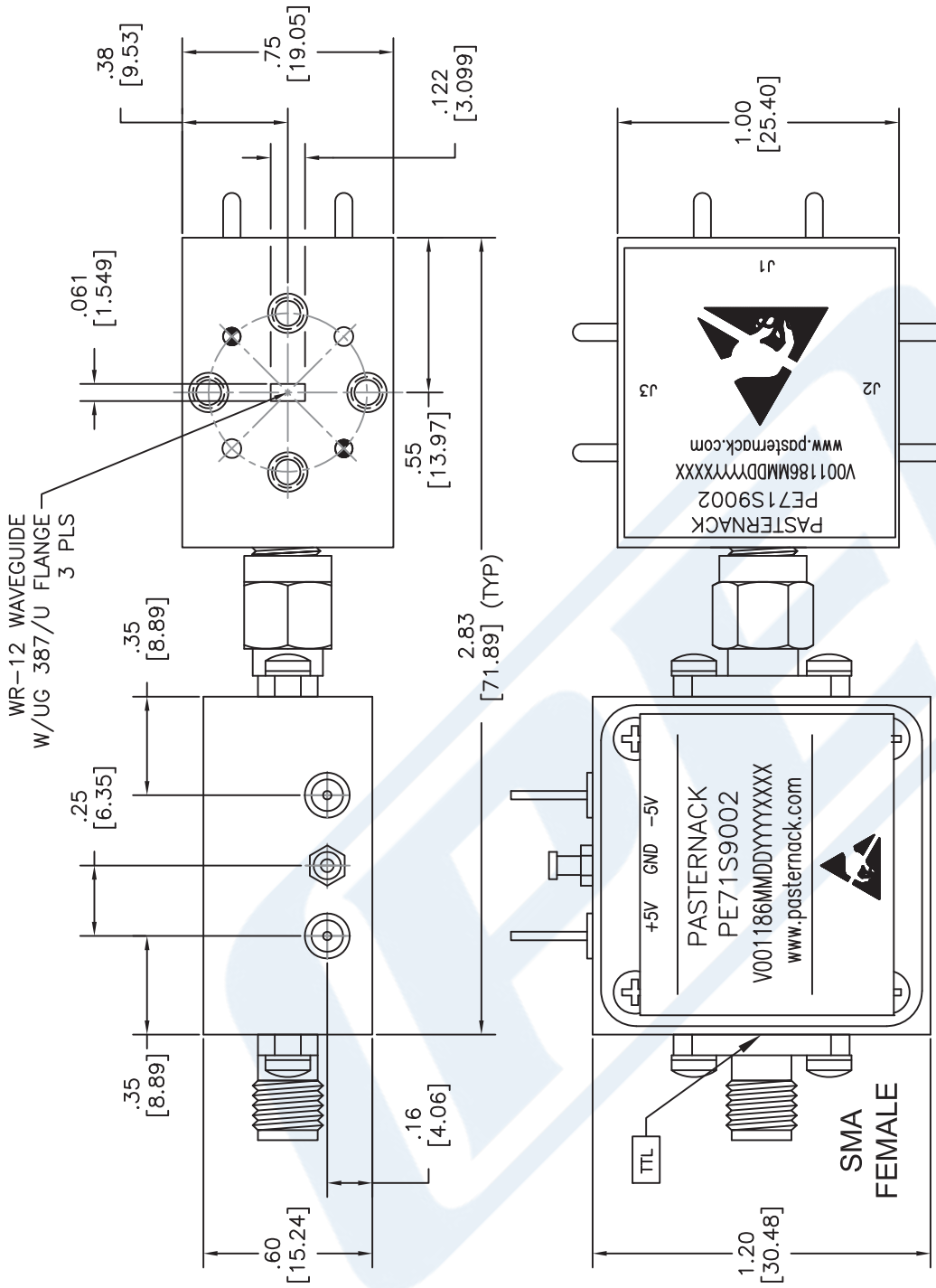
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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.

# PE71S9002 CAD Drawing

WR-12 PIN Diode SPDT Waveguide Switch Operating From  
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UNLESS OTHERWISE SPECIFIED:  
DIMENSIONS ARE IN: inches [mm]  
TOLERANCES ARE: DECIMALS FRACTIONS  
.XX ±.01 ±1/2' ± 1/64  
.XXX ±.005 [± 127/320]  
[±.127]

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

**(PE) PASTERNAK®**  
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DWG TITLE  
**PE71S9002**

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].  
4. FITS MIL-C-17 AND EQUIVALENT CABLES.

FSCM NO. 53919

CAD FILE 042516

SCALE N/A

SIZE A

2233