



# Absorptive SPST PIN Diode Switch Operating From 8 GHz to 12 GHz Up to +20 dBm and Field Replaceable SMA

## PIN Diode Switches Technical Data Sheet

PE71S6234

### Features

- SPST Absorptive Switch
- 8.0 GHz to 12.0 GHz
- Insertion Loss 1.8 dB max
- Isolation 70 dB min
- Power Input 20 dBm CW max
- Field Replaceable Connectors

### Applications

- Test & Measurement
- Military Communication
- Commercial Communication
- Wireless Communications
- SATCOM
- Military Electronic Systems
- RF Test Stations

### Description

The PE71S6234 is a Single Pole Single Throw (SPST) Absorptive PIN Diode Switch that operates from 8 GHz to 12 GHz. The output port is terminated in 50 ohms when switched in the isolation (off) state. Outstanding typical performance includes < 1.8 dB insertion loss, > 70 dB isolation, and < 50 nsec switching speed. The design incorporates TTL compatible driver circuitry for accurate logic control. Operational temperature range is -40°C to +85°C and dual voltage controls of +5 Vdc and -15 Vdc are required. The rugged package is designed to meet a series of MIL-STD-202F environmental conditions including humidity, shock, vibration, and temperature cycle. Package interfaces include solder terminals and female SMA connectors.

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	8		12	GHz
Impedance		50		Ohms
Insertion Loss			1.8	dB
Isolation	70			dB
Switching Time			50	ns
Input Power (CW)			0.1	Watts
Survival Power			1	Watts
Positive Operating Voltage		5		V
Negative Operating Voltage		-15		V
Current @ 5 V		20		mA
Current @ -15 V		40		mA
Operating Temperature	-40		+85	deg C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Absorptive SPST PIN Diode Switch Operating From 8 GHz to 12 GHz Up to +20 dBm and Field Replaceable SMA PE71S6234](#)





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**Mechanical Specifications**

**Size**

Length	1 in [25.4 mm]
Width	1 in [25.4 mm]
Height	0.5 in [12.7 mm]
Weight	0.05 lbs [22.68 g]
Finish	Blue Paint

**Configuration**

Design	Absorptive, SPST
RF Connector	SMA Female
RF Connector Option	Field Replaceable
TTL Control Connector	Solder Pin

**Environmental Specifications**

**Temperature**

Operating Range	-40 to +85 deg C
Storage Range	-55 to +125 deg C

Humidity	MIL-STD-202F, Method 103B, Condition B
Shock	MIL-STD-202F, Method 213B, Condition B
Vibration	MIL-STD-202F, Method 204D, Condition B
Altitude	MIL-STD-202F, Method 105C, Condition B
Temperature Cycling	MIL-STD-202F, Method 107D, Condition A
ESD Sensitivity	ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in ESD Workstation.



**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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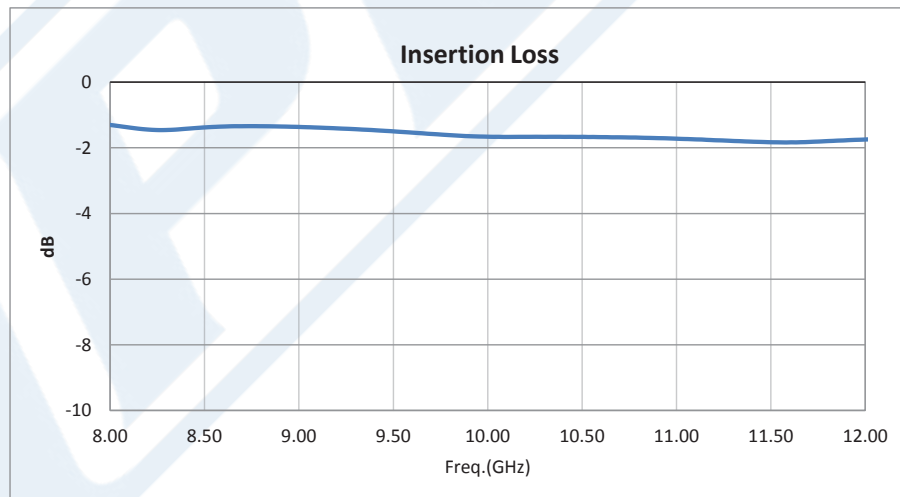
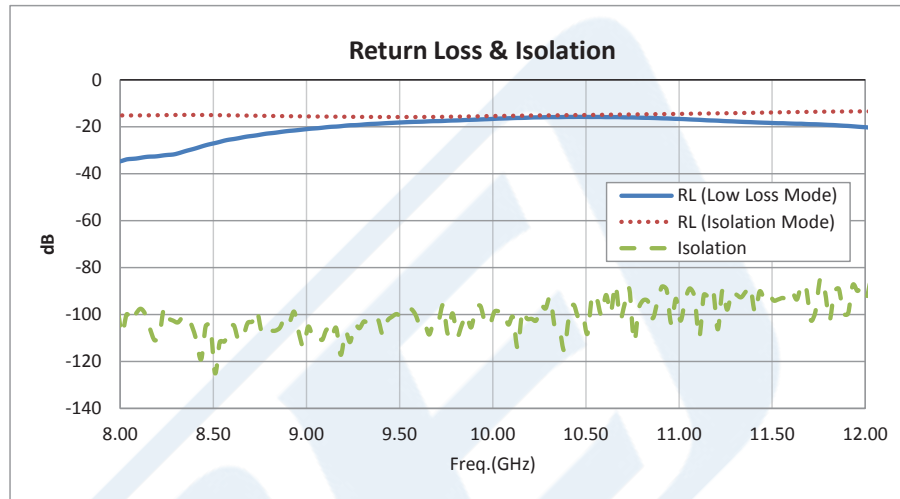


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Typical Performance Data



Absorptive SPST PIN Diode Switch Operating From 8 GHz to 12 GHz Up to +20 dBm and Field Replaceable SMA 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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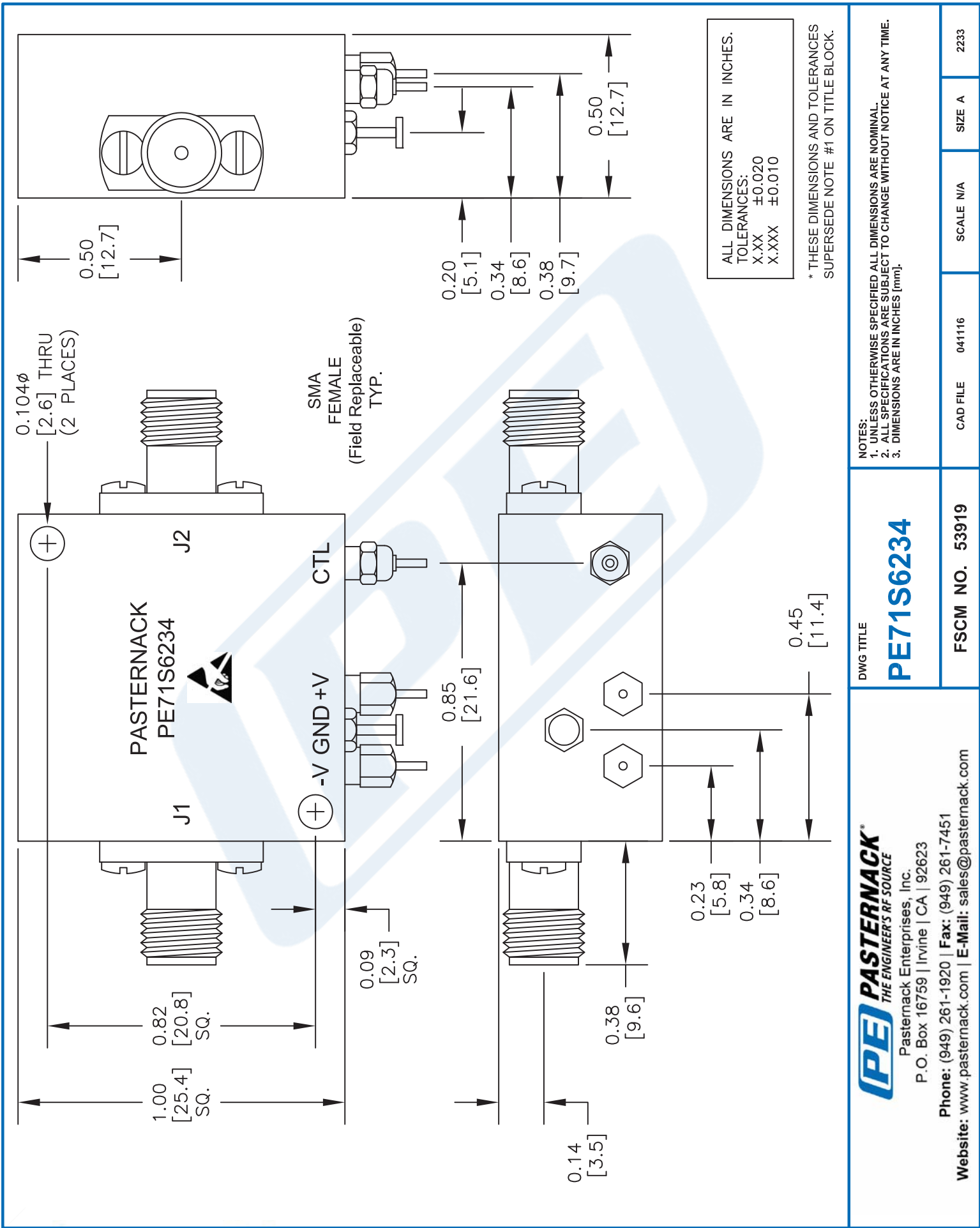
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# PE71S6234 CAD Drawing

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DWG TITLE

**PE71S6234**

FSCM NO. 53919

CAD FILE 041116

SCALE N/A

SIZE A

2233

**(PE) PASTERNAK**  
THE ENGINEER'S RF SOURCE

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