



Absorptive Transfer PIN Diode Switch Operating From 1 GHz to 18 GHz Up to +27 dBm and Field Replaceable SMA

## PIN Diode Switches Technical Data Sheet

PE71S6292

### Features

- Transfer Absorptive Switch
- 1 GHz to 18 GHz
- Insertion Loss 3.1 dB max
- Isolation 65 dB min
- Input Power 27 dBm CW max
- Field Replaceable Connectors

### Applications

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

### Description

The PE71S6292 is a Transfer Absorptive Switch that operates from 1 GHz to 18 GHz. Performance includes 3.1 dB max insertion loss, 65 dB min isolation, and 100 nsec max switching speed. The design incorporates TTL compatible driver circuitry for accurate logic control. Operational temperature range is -55°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	1		18	GHz
Impedance		50		Ohms
VSWR			2:1	
Insertion Loss			3.1	dB
Isolation	65			dB
Switching Time			100	ns
Input Power (CW)			0.5	Watts
Positive Operating Voltage		5		Vdc
Negative Operating Voltage		-15		Vdc
Operating Temperature	-55		+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 Transfer PIN Diode Switch Operating From 1 GHz to 18 GHz Up to +27 dBm and Field Replaceable SMA PE71S6292](#)



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### Mechanical Specifications

#### Size

Length	1.2 in [30.48 mm]
Width	1.2 in [30.48 mm]
Height	0.5 in [12.7 mm]
Weight	0.082 lbs [37.19 g]
Finish	Blue Paint

#### Configuration

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

### Environmental Specifications

#### Temperature

Operating Range	-55 to +85 deg C
Storage Range	-65 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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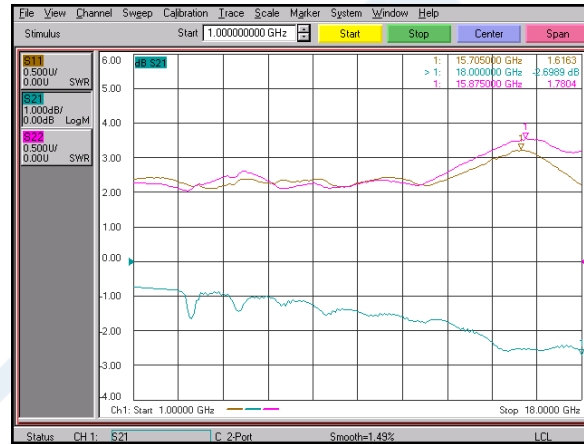
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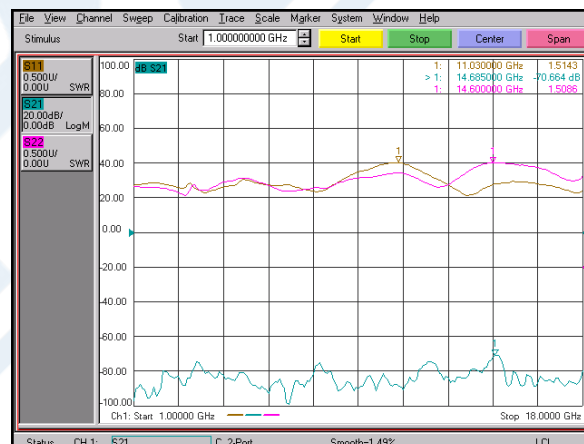
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### Typical Performance Data

#### (J1 – J2) Insertion Loss and Return Loss



#### (J1 – J2) Isolation and Termination Return Loss



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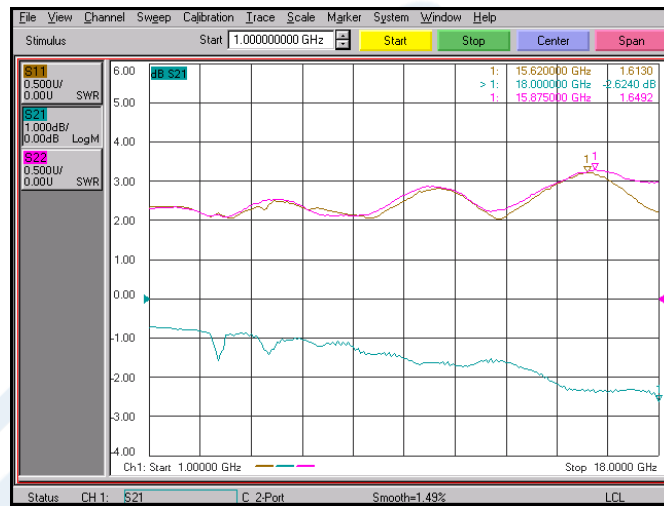


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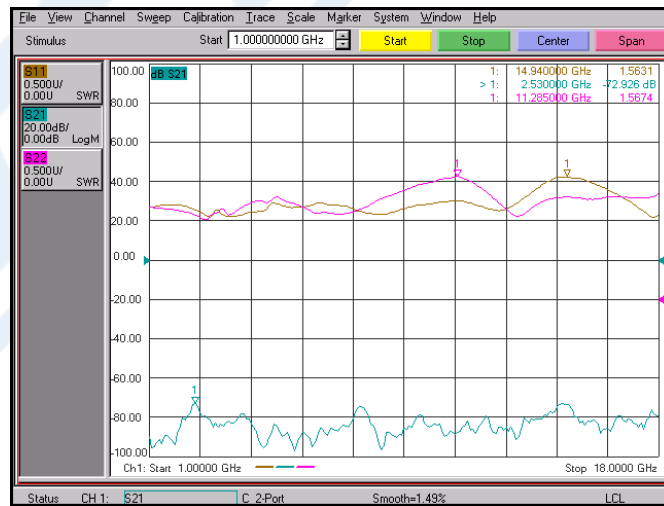
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PE71S6292

### (J3 – J4) Insertion Loss and Return Loss



### (J3– J4) Isolation and Termination Return Loss



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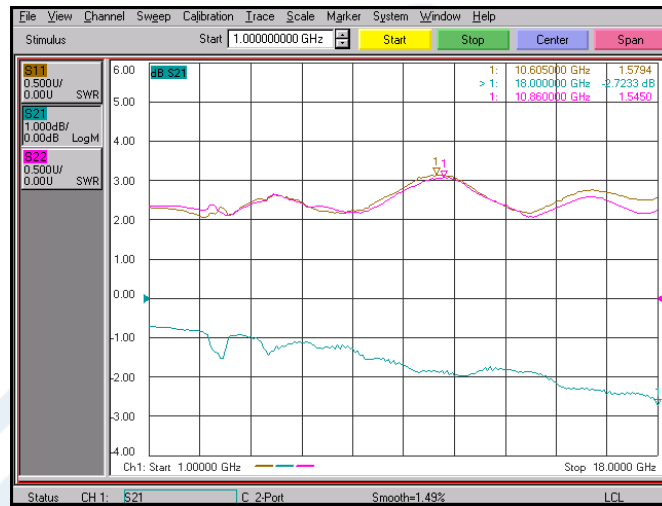


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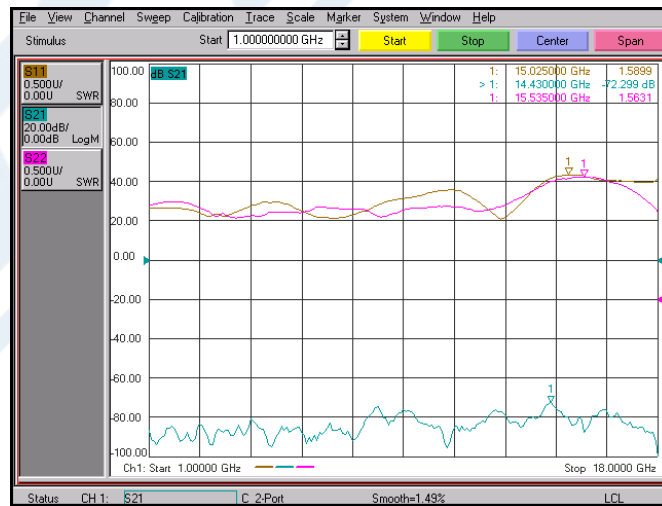
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### (J1 – J4) Insertion Loss and Return Loss



### (J1 – J4) Isolation and Termination Return Loss



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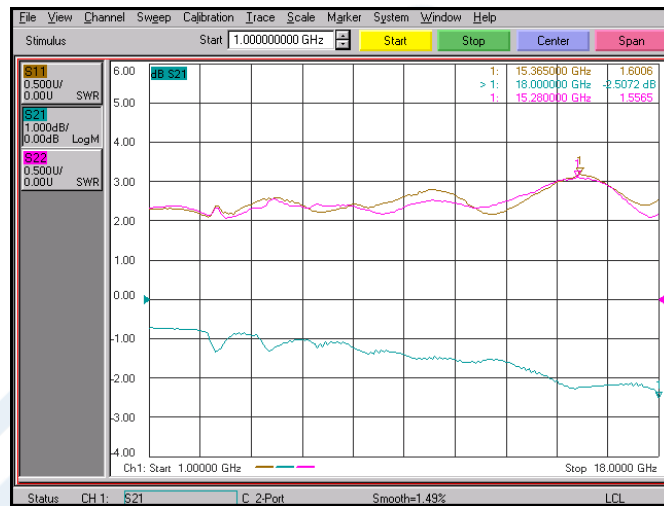


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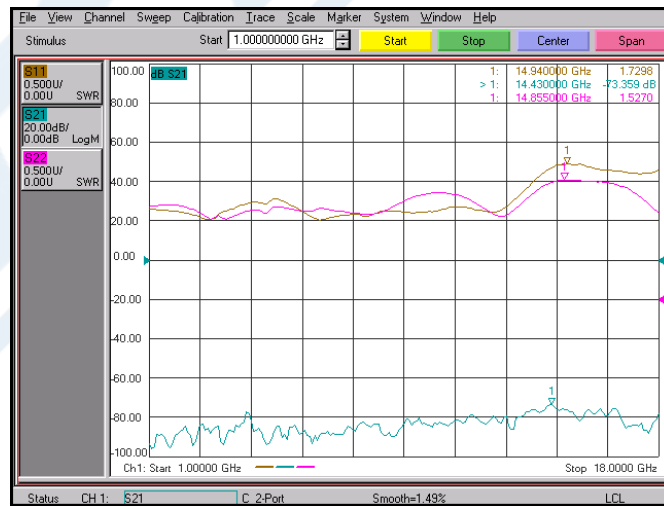
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PE71S6292

### (J2 – J3) Insertion Loss and Return Loss



### (J2 – J3) Isolation and Termination Return Loss



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