



90 dB High Isolation SPDT PIN Diode Switch 1 GHz to 2 GHz, 1 dB Insertion Loss with SMA

TECHNICAL DATA SHEET

PE71S5002

Pasternack model PE71S5002 is a general purpose 1.0 GHz to 2.0 GHz single pole, double throw high isolation, absorptive switch. This switch offers 90 dB typical port-to-port isolation, and a typical insertion loss of 1.0 dB at room temperature. It has a 75 ns typical switching speed, and independently TTL controlled.

Features

- SPDT PIN Diode Absorptive Switch
- 1 GHz to 2 GHz Frequency Range
- Insertion Loss: 1.0 db typical
- High Isolation: 90 dB typical
- VSWR: 1.3:1
- Fast Switching Speed: 75 nsec.
- Integrated TTL Driver
- Power Handling: +32 dBm
- Operating Temperature Range: -54 °C to 85°C

Applications

- Electronic Warfare
- Radar
- Test & Measurements
- Military & Space
- Military Communication Systems
- PIN diode switch

Electrical Specifications

Description	Typical at 25 °C	-54 to +85 °C	Units
Frequency Range	1 - 2	1 - 2	GHz
Insertion Loss	1	1.2	dB
Isolation	90	85	dB
VSWR	1.3:1	1.5:1	
Switching Speed	75	100	ns
DC Bias at 5 VDC	70	80	mA
DC Bias at -15 VDC	40	50	mA
Control Input	TTL	TTL	
Power Handling	+32	+30	dBm

TTL Logic Table

TTL LOGIC TABLE		
CTL	J1-J2	J1-J3
0	LOW LOSS	INSOLATED
1	INSOLATED	LOW LOSS

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [90 dB High Isolation SPDT PIN Diode Switch 1 GHz to 2 GHz, 1 dB Insertion Loss with SMA PE71S5002](#)



90 dB High Isolation SPDT PIN Diode Switch 1 GHz
to 2 GHz, 1 dB Insertion Loss with SMA

TECHNICAL DATA SHEET

PE71S5002

Absolute Maximum Rating

Parameter	Rating	Units
Positive Voltage	+7	Volts
Negative Voltage	-14	Volts
RF input Power	+30	dBm
Operating Temperature	-54 to +85	°C
Storage Temperature	-55 to +100	°C



ESD Sensitive Material,
Transport material in
Approved ESD bags.
Handle only in approved
ESD Workstation.

Mechanical Specifications

Size

Length	1.2 in [30.48 mm]
Width/Dia.	0.9 in [22.86 mm]
Height	0.35 in [8.89 mm]

Environmental Specifications By Design

Temperature

Operating Range	-54 to +85 deg C
Humidity	Mil-STD-810 507.4
Shock	Mil-STD-810 method 504, 516.5
Vibration	Mil-STD-810 514.6
Temperature Cycle	Mil-STD-810 501.5, 502.5

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

Not RoHS Compliant

Plotted and Other Data

Notes:

- Values at +25 °C, sea level
- ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [90 dB High Isolation SPDT PIN Diode Switch 1 GHz to 2 GHz, 1 dB Insertion Loss with SMA PE71S5002](#)

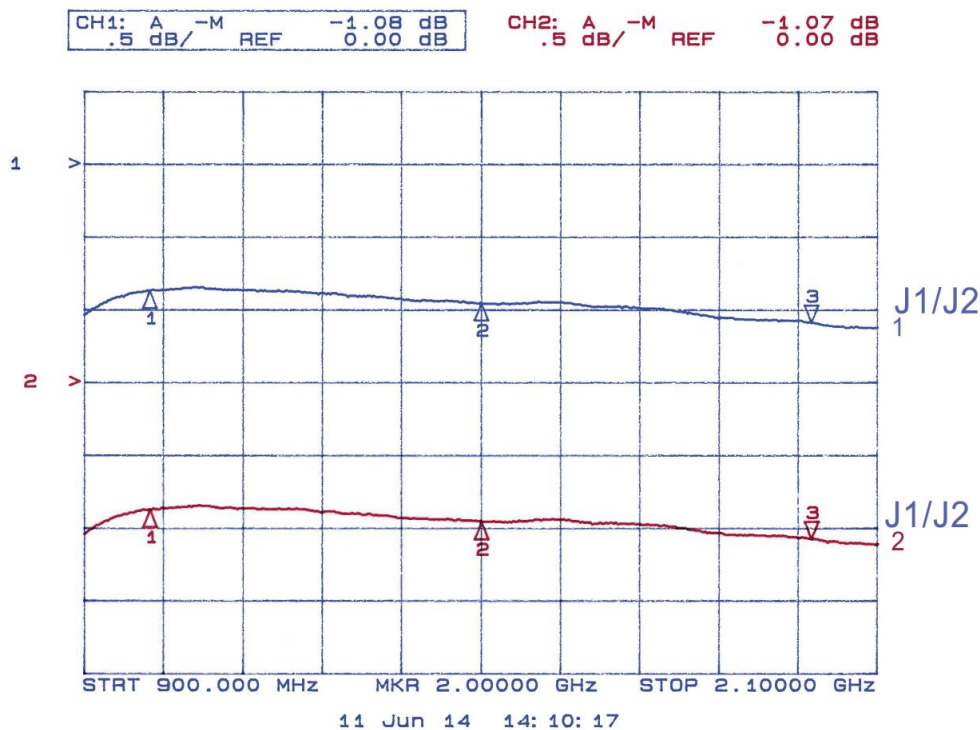


90 dB High Isolation SPDT PIN Diode Switch 1 GHz
to 2 GHz, 1 dB Insertion Loss with SMA

TECHNICAL DATA SHEET

PE71S5002

Power Data



Insertion Loss

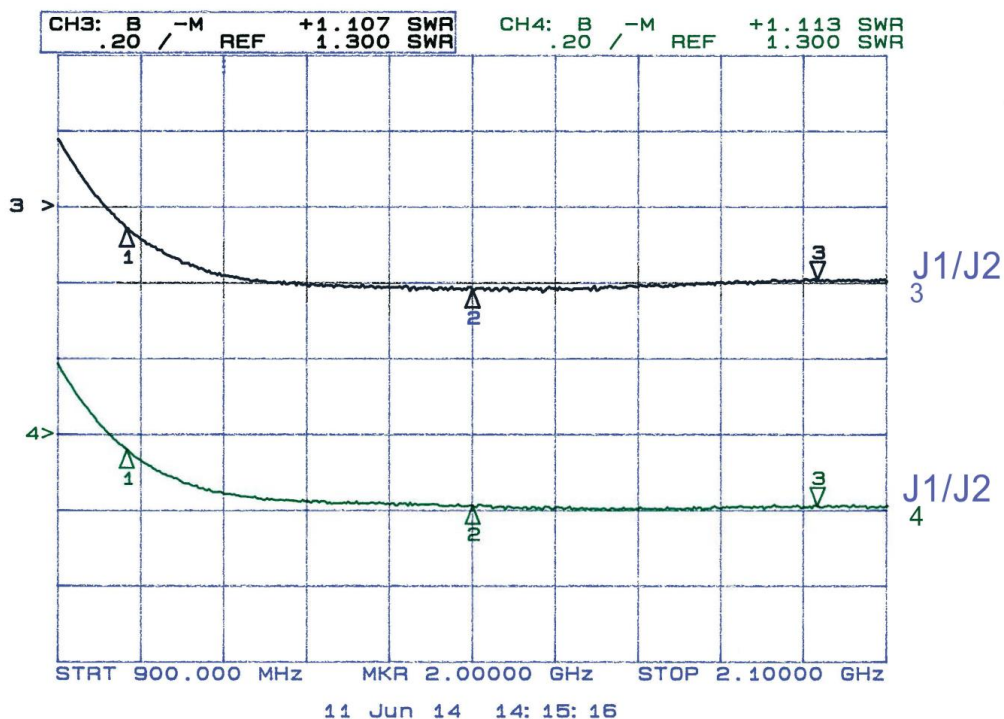
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [90 dB High Isolation SPDT PIN Diode Switch 1 GHz to 2 GHz, 1 dB Insertion Loss with SMA PE71S5002](#)



90 dB High Isolation SPDT PIN Diode Switch 1 GHz
to 2 GHz, 1 dB Insertion Loss with SMA

TECHNICAL DATA SHEET

PE71S5002



VSWR

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [90 dB High Isolation SPDT PIN Diode Switch 1 GHz to 2 GHz, 1 dB Insertion Loss with SMA PE71S5002](#)

