



Absorptive SPDT PIN Diode Switch Operating From 20 MHz to 4.3 GHz Up to 1 Watt (+30 dBm) and SMA

PIN Diode Switches Technical Data Sheet

PE71S2035

Features

- SPDT PIN Diode Switch
- Terminated
- 20 to 4300 MHz Bandwidth
- Insertion loss: 3 dB max
- Isolation: 55 dB min
- 50 Ohms
- Switching Speed: 10 microseconds
- DC voltage: +24 Vdc
- SMA female connectors
- TTL Control Logic

Applications

- Electronic Warfare
- Test & Measurement
- Military and Wireless Communications Systems
- Military & Space
- Radar

Description

The PE71S2035 is a single pole double throw (SPDT) terminated PIN diode switch that operates over the frequency range of 20 MHz to 4300 MHz. The 50 ohm design supports TTL control logic and is rated up to 1 watt average RF input power. Typical performance includes 3 dB insertion loss and greater than 55 dB isolation. Switching speed is 10 microseconds with 1.5:1 typical VSWR and an operating voltage of +24 Vdc with 50 mA nominal current. The rugged package design supports SMA Female RF input/output connectors. The Switch design is highly reliable with an operational temperature of 0°C to +70°C.

Electrical Specifications

TTL Control

Off/Isolation: "0"

On/Low Loss: "1"

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.02		4.3	GHz
Impedance		50		Ohms
VSWR			1.5:1	
Switching Time			10	µs
Input Power (CW)			1	Watts
Positive Operating Voltage		24		Vdc
Current @ 24 Vdc		50		mA
Operating Temperature	0		+70	deg C

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	0.02 to 1	1 to 2	2 to 4	4 to 4.3		GHz
Insertion Loss, Max	1.5	3	3	3		dB
Isolation, Min	80	70	60	55		dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Absorptive SPDT PIN Diode Switch Operating From 20 MHz to 4.3 GHz Up to 1 Watt \(+30 dBm\) and SMA PE71S2035](#)



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Mechanical Specifications

Size

Design
RF Connector

Absorptive, SPDT
SMA Female

Environmental Specifications

Temperature

Operating Range
Storage Range

0 to +70 deg C
-55 to +90 deg C

ESD Sensitivity

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

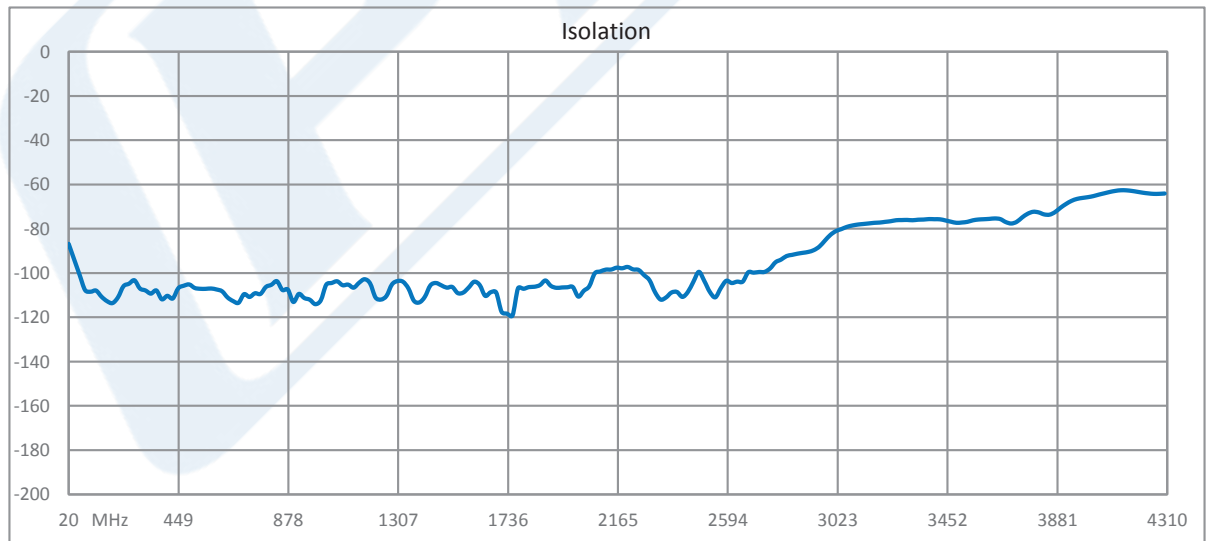


Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Typical Performance Data



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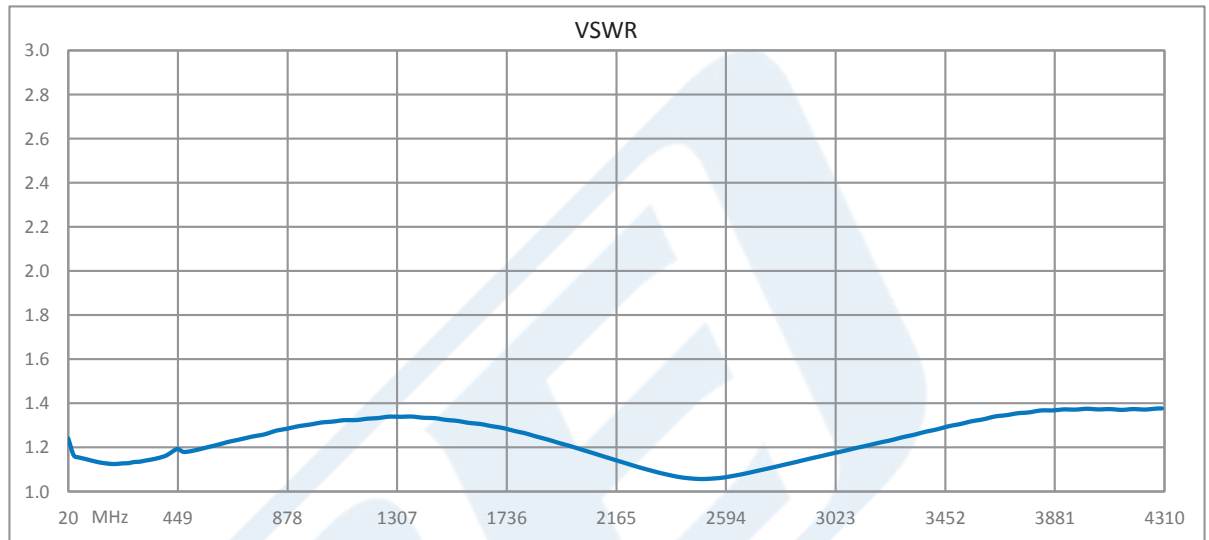




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Absorptive SPDT PIN Diode Switch Operating From 20 MHz to 4.3 GHz Up to 1 Watt (+30 dBm) and SMA from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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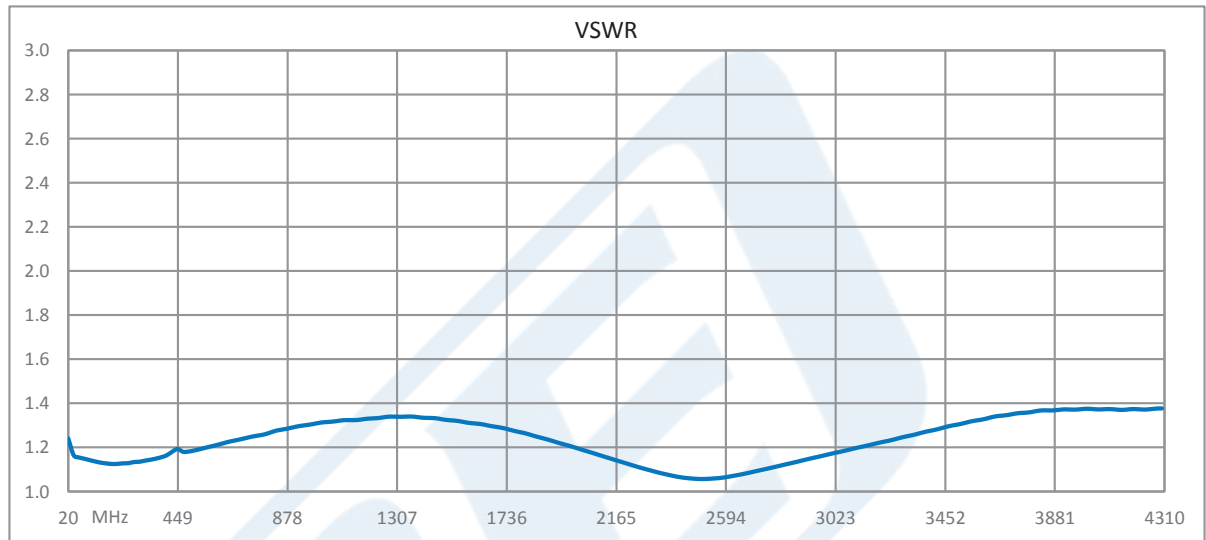




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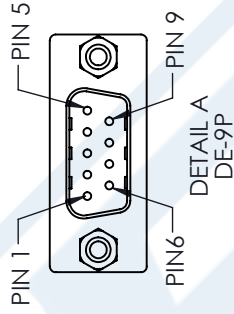
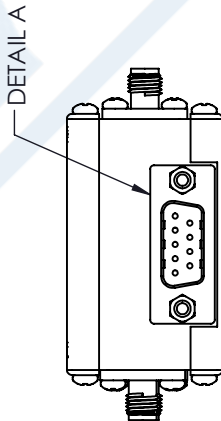
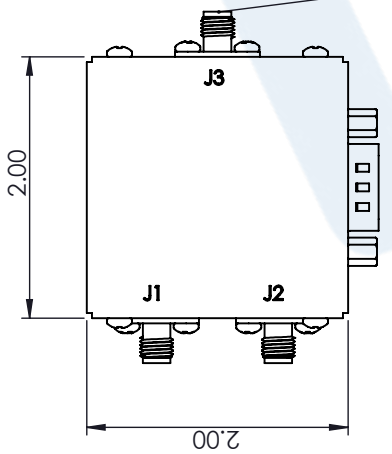
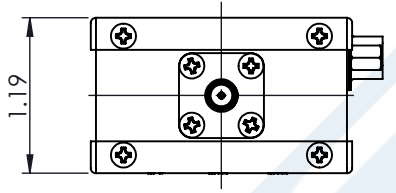
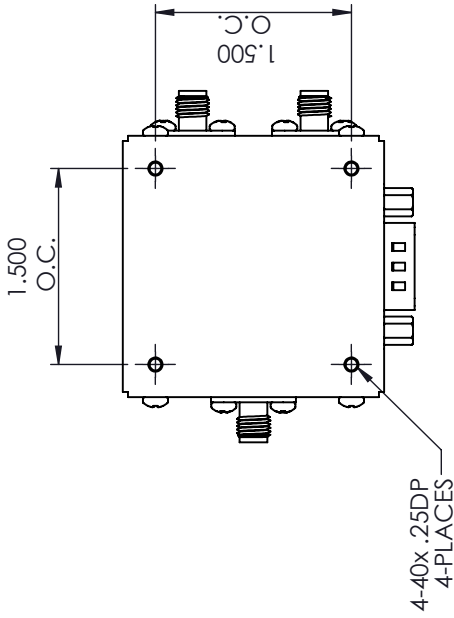
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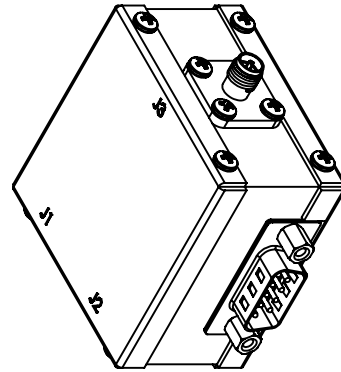
PE71S2035 CAD Drawing

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J3 TO	C1	C2
J1	1	0
J2	0	1
OFF	0	0

PIN	FUNCTION
1	TTL CONTROL 1
2	TTL CONTROL 2
3	NO CONNECTION
4	NO CONNECTION
5	NO CONNECTION
6	NO CONNECTION
7	+5 Vdc
8	+24 Vdc
9	GROUND



STANDARD TOLERANCES
.X ±0.2
.XX ±0.01
.XXX ±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



THE ENGINEER'S RF SOURCE

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DWG TITLE

PE71S2035

CAGE CODE 53919

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].

CAD FILE 052617

SCALE N/A

SIZE A

CN 0157