



Absorptive SPDT PIN Diode Switch Operating From 5 MHz to 2.15 GHz Up to 0 Watts (dBm) and 75 Ohm F

PIN Diode Switches Technical Data Sheet

PE71S2043

Features

- SPDT PIN Diode Switch
- Terminated
- 5 to 2150 MHz Bandwidth
- Insertion loss: 2.5 dB max
- Isolation: 70 dB min
- 50 Ohms
- Switching Speed: 10 microseconds
- DC voltage: +12 Vdc
- F type female connectors
- TTL Control Logic

Applications

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

Description

The PE71S2043 is a single pole double throw (SPDT) terminated PIN diode switch that operates over the frequency range of 5 MHz to 2150 MHz. The 75 ohm design supports TTL control logic and is rated up to watt average RF input power. Typical performance includes 1.5 dB insertion loss and greater than 70 dB isolation. Switching speed is 40 microseconds with 1.4:1 typical VSWR and an operating voltage of +12 Vdc with 150 mA nominal current. The rugged package design supports F 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" 0 to 0.8 V
On/Low Loss: "1" 2 to 5 V

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.005		2.15	GHz
Impedance		75		Ohms
VSWR		1.25:1	1.4:1	
Insertion Loss		1.5	2.5	dB
Isolation	70	80		dB
Switching Time			100	µs
Positive Operating Voltage		12		Vdc
Current @ 12 Vdc		150		mA
Operating Temperature	0		+70	deg C

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	0.005 to 0.1	0.1 to 2.15				GHz
Input Power (CW), Max	0.01	0.1				Watts

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 5 MHz to 2.15 GHz Up to 0 Watts \(dBm\) and 75 Ohm F PE71S2043](#)



Absorptive SPDT PIN Diode Switch Operating From 5 MHz
to 2.15 GHz Up to 0 Watts (dBm) and 75 Ohm F

PIN Diode Switches Technical Data Sheet

PE71S2043

Mechanical Specifications

Size

Design
RF Connector

Absorptive, SPDT
F 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.

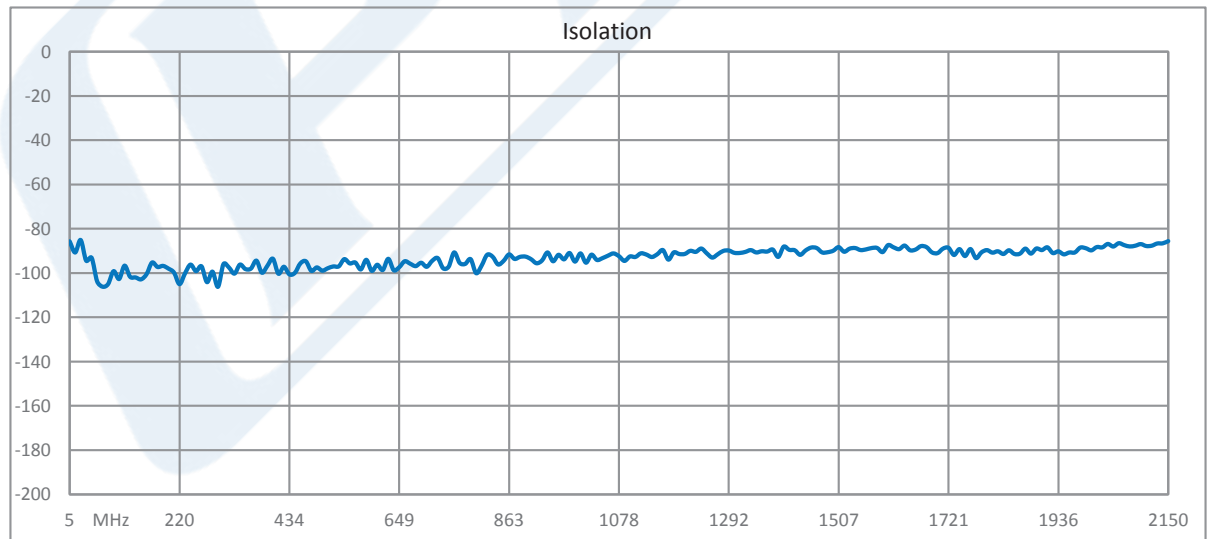


Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Typical Performance Data



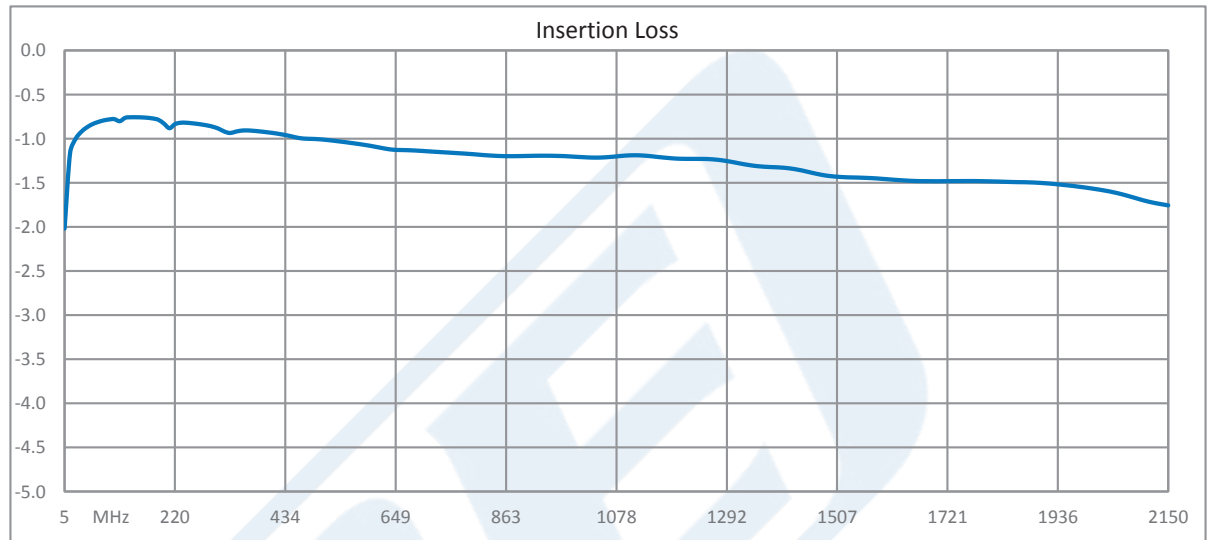
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Absorptive SPDT PIN Diode Switch Operating From 5 MHz to 2.15 GHz Up to 0 Watts \(dBm\) and 75 Ohm F PE71S2043](#)



Absorptive SPDT PIN Diode Switch Operating From 5 MHz
to 2.15 GHz Up to 0 Watts (dBm) and 75 Ohm F

PIN Diode Switches Technical Data Sheet

PE71S2043



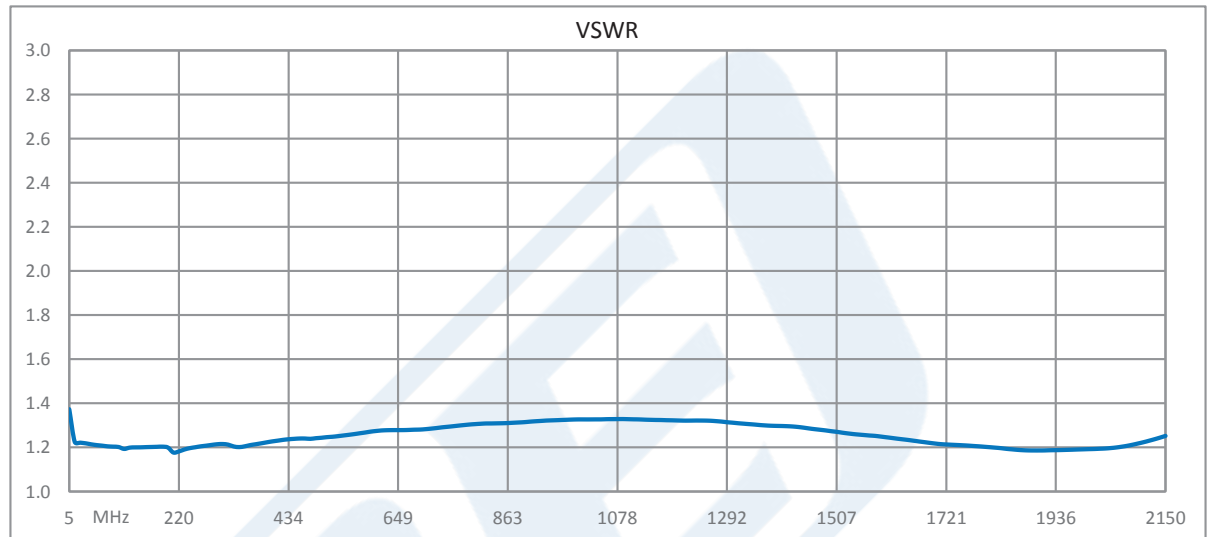
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Absorptive SPDT PIN Diode Switch Operating From 5 MHz to 2.15 GHz Up to 0 Watts \(dBm\) and 75 Ohm F PE71S2043](#)



Absorptive SPDT PIN Diode Switch Operating From 5 MHz to 2.15 GHz Up to 0 Watts (dBm) and 75 Ohm F

PIN Diode Switches Technical Data Sheet

PE71S2043



Absorptive SPDT PIN Diode Switch Operating From 5 MHz to 2.15 GHz Up to 0 Watts (dBm) and 75 Ohm F 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.

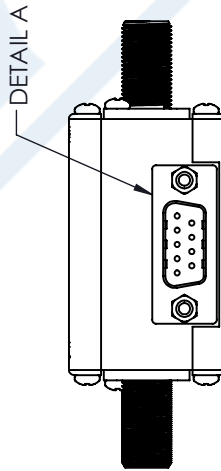
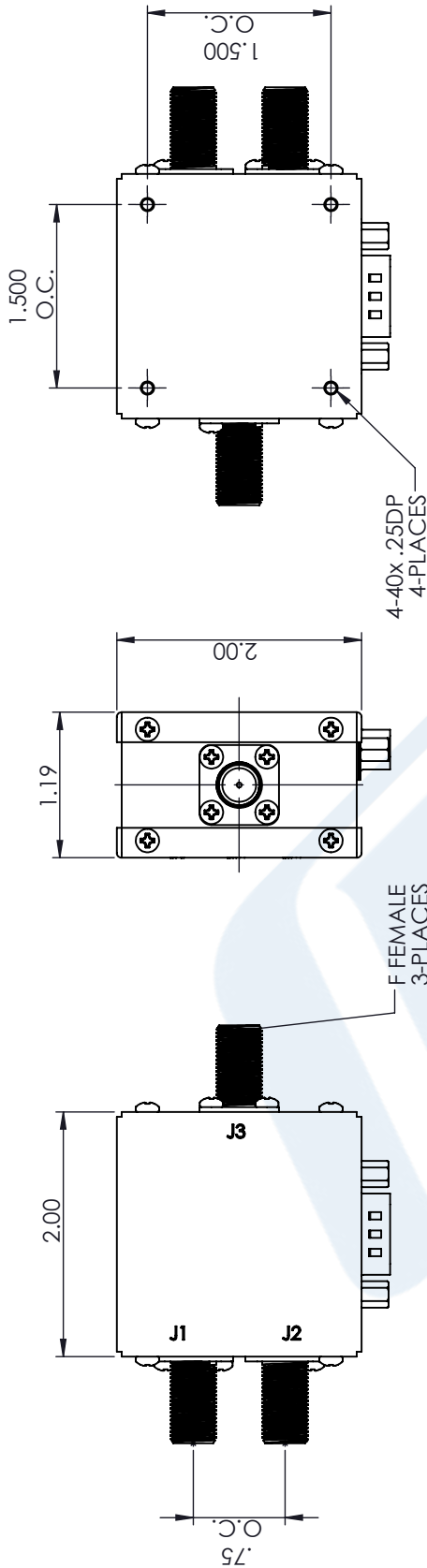
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Absorptive SPDT PIN Diode Switch Operating From 5 MHz to 2.15 GHz Up to 0 Watts \(dBm\) and 75 Ohm F PE71S2043](https://www.pasternack.com/absorptive-spdt-pin-diode-switch-2.15-ghz-75-ohm-f-pe71s2043-p.aspx)

URL: <https://www.pasternack.com/absorptive-spdt-pin-diode-switch-2.15-ghz-75-ohm-f-pe71s2043-p.aspx>

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.

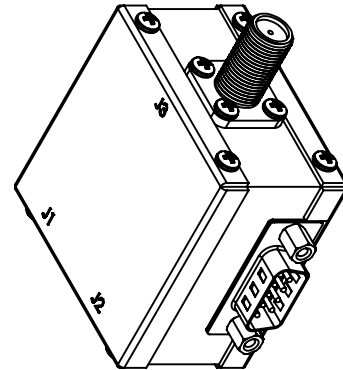
PE71S2043 CAD Drawing

Absorptive SPDT PIN Diode Switch Operating From 5 MHz
to 2.15 GHz Up to 0 Watts (dBm) and 75 Ohm F



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

PIN	FUNCTION
1	TTL CONT 1
2	TTL CONT 2
3	NO CONNECTION
4	NO CONNECTION
5	NO CONNECTION
6	NO CONNECTION
7	NO CONNECTION
8	+12 Vdc
9	GROUND



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

*STANDARD TOLERANCES APPLY
ONLY TO DIMENSIONS IN INCHES

PE PASTERNAK®
THE ENGINEER'S RF SOURCE

Pasternack Enterprises, Inc.
P.O. Box 16759 | Irvine | CA | 92623
Phone: (949) 261-1920 | Fax: (949) 261-7451
Website: www.pasternack.com | E-Mail: sales@pasternack.com

DWG TITLE

PE71S2043

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].

CAGE CODE 53919

CAD FILE 052617

SCALE N/A

SIZE A

CN 0157