



50 Ohm SMA SP8T PIN Diode Switch Operating
From 500 MHz to 18 GHz Up To +20 dBm

TECHNICAL DATA SHEET

PE7168

Broadband SP8T (Single Pole Eight Throw) PIN Diode Absorptive Switch with SMA connectors and Operating Power of 100mW (20 dBm)

Pasternack line of Broadband Switches offers a couple of frequency ranges, which are 0.5 to 18 GHz and 0.5 to 40 GHz. They are available in various configurations from SPST (Single Pole Single Throw), single-pole-double-throw (SP2T), single-pole-three-throw (SP3T), single-pole-four-throw (SP4T) and single-pole-eight-throw (SP8T). Pasternack's Broadband Switches are PIN Diode Absorptive Switch designs capable of handling power levels to 100mW (20 dBm) at a switching speed of 100 ns (nanoseconds). This line of Absorptive PIN Diode Switches are designed with TTL logic controls.

- Designs with Operating Frequencies from 0.5 GHz up to 18 GHz or 40 GHz
- Available configurations are SPST, SP2T, SP3T, SP4T and SP8T
- SMA or 2.92mm connector
- Switching Speed of 100ns Maximum
- Power ratings of 20dBm
- TTL Control Logic diagram can be found on attached drawing

Configuration

RF Connector	SMA Female
Control Connector	Solder Pin
Design	Absorptive, SP8T

Electrical Specifications

Frequency Range, GHz	0.5 to 18
Impedance, Ohms	50
Maximum Input Power, dBm	+20
Maximum Input VSWR	2:1
Maximum Output VSWR	2:1
Maximum Insertion Loss, dB	4.5
Minimum Isolation, dB	55
Maximum Speed, ns	100
Power Supply 1, Volts	5
Power Supply 2, Volts	-5

Mechanical Specifications

Temperature

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

Size

Length, in [mm]	3.7 [93.98]
Width, in [mm]	1.5 [38.1]
Height, in [mm]	0.4 [10.16]
Housing Material and Plating	Aluminum, Paint

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [50 Ohm SMA SP8T PIN Diode Switch Operating From 500 MHz to 18 GHz Up To +20 dBm PE7168](#)

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.



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

RoHS Compliant

Yes

Plotted and Other Data

Notes:

Values at 25 °C, sea level

50 Ohm SMA SP8T PIN Diode Switch Operating From 500 MHz to 18 GHz Up To +20 dBm from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

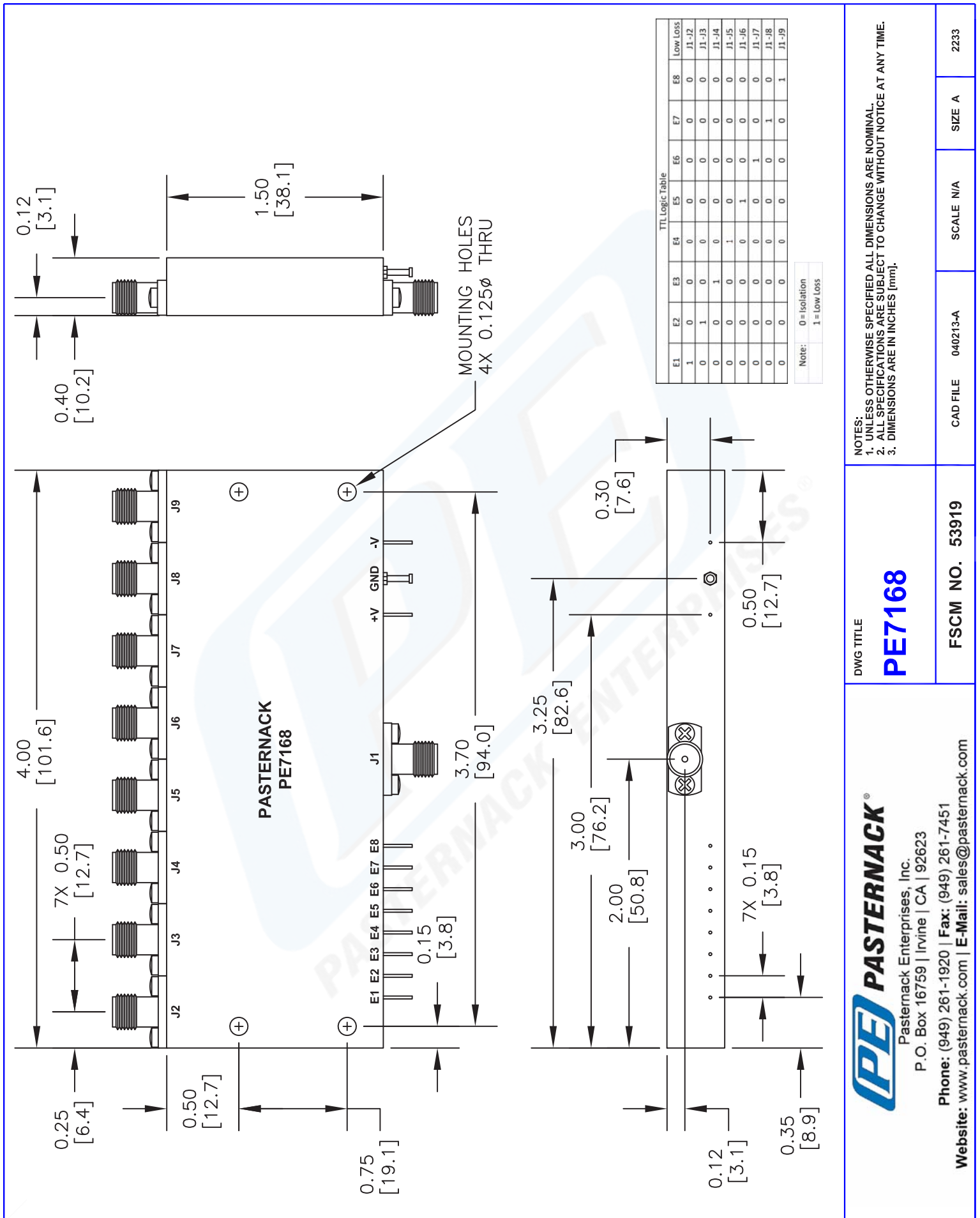
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [50 Ohm SMA SP8T PIN Diode Switch Operating From 500 MHz to 18 GHz Up To +20 dBm PE7168](http://www.pasternack.com/50-ohm-sma-sp8t-pin-diode-switch-500-mhz-to-18-ghz-pe7168-p.aspx)

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PE7168 CAD Drawing

50 Ohm SMA SP8T PIN Diode Switch Operating From 500 MHz to 18 GHz Up To +20 dBm



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DWG TITLE

PE7168

FSCM NO. 53919

CAD FILE 040213-A

SCALE N/A

SIZE A

2233