

SMA PIN Diode Switch SP5T From 100 MHz to 20 GHz Rated at +27 dBm

FMSW2031 is a Single Pole Five Throw (SP5T) Absorptive PIN Diode Switch that operates from 0.1 to 20 GHz. The output port is terminated in 50 ohms when switched in the isolation (off) state. Electrical performance includes 3.9 dB max insertion loss, 65 dB min isolation, and 75 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 -12 Vdc are required. The package interface uses solder terminals and SMA Female connectors.



Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	0.1		20	GHz
Impedance		50		Ohms
VSWR			2:1	
Insertion Loss			3.9	dB
Isolation	65			dB
Switching Time			75	ns
Input Power (CW)			0.5	Watts
Positive Operating Voltage		5		V
Negative Operating Voltage		-12		V
Current @ 5 V		200		mA
Current @ -12 V		40		mA
Operating Temperature	-55		+85	deg C

Mechanical Specifications

Length	1.34 in [34.04 mm]
Width	1.34 in [34.04 mm]
Height	0.45 in [11.43 mm]
Weight	0.09 lbs [40.82 g]
Design	Absorptive, SP5T
RF Connector	SMA Female
RF Connector Specification	MIL-C-39012
Control Connector	Solder Pin

Environmental Specifications

Temperature

Operating Range	-55 to +85 deg C
Storage Range	-65 to +125 deg C

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



Features:

- SP5T Absorptive Switch
- 100 MHz to 20 GHz
- Insertion Loss 3.9 dB max
- Isolation 65 dB min
- Switching speed 75 nsec max
- Max Operating Power +27 dBm

Applications:

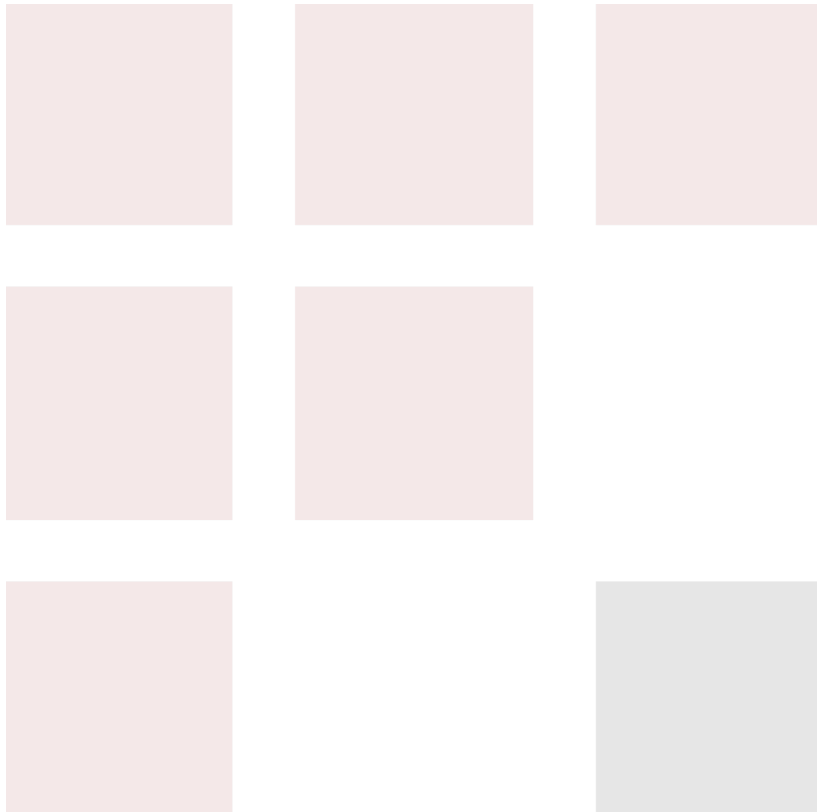
- Communications Systems
- Electronic Simulators
- Bypass Switch
- Test Equipment
- Radar Systems
- EW Systems

Fairview Microwave
1130 Junction Dr. #100
Allen, TX 75013
Tel: 1-800-715-4396 / (972) 649-6678
Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

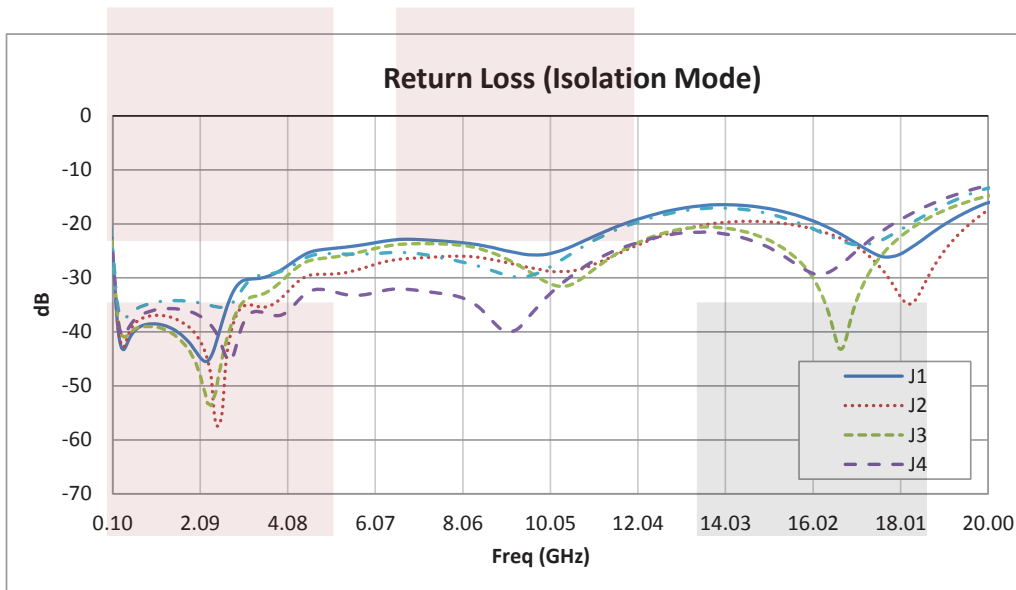
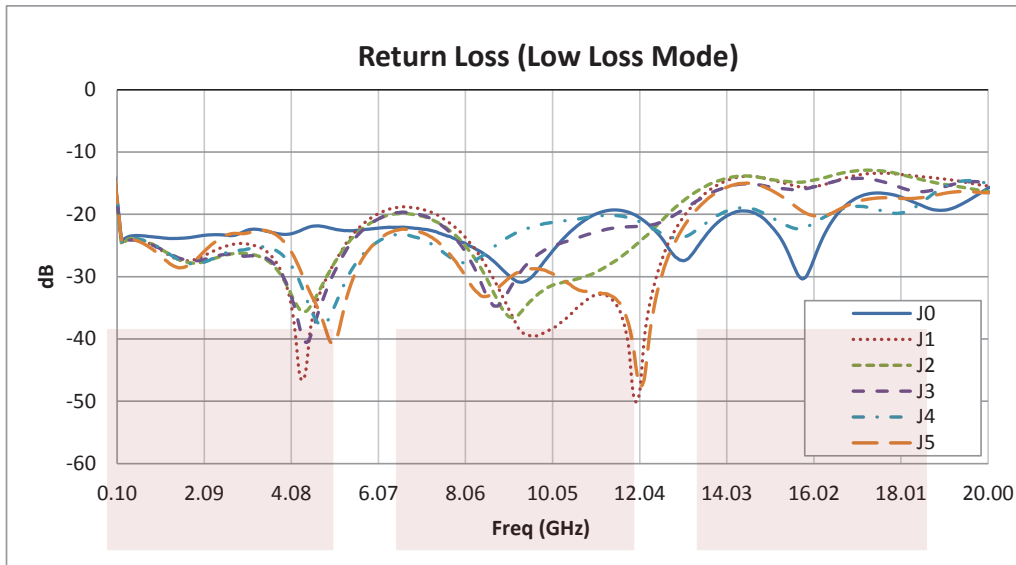
Compliance Certifications (visit www.FairviewMicrowave.com for current document)

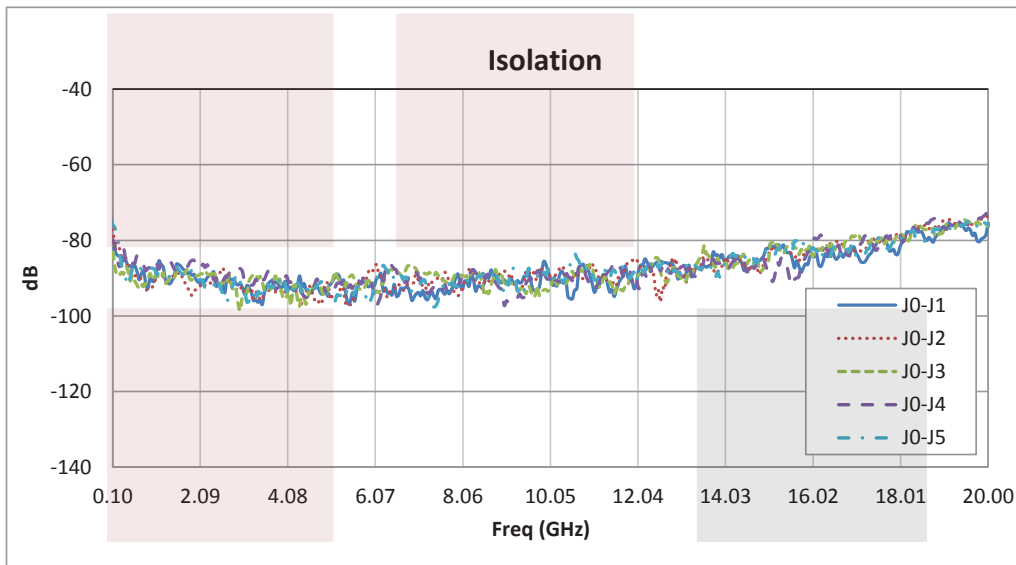
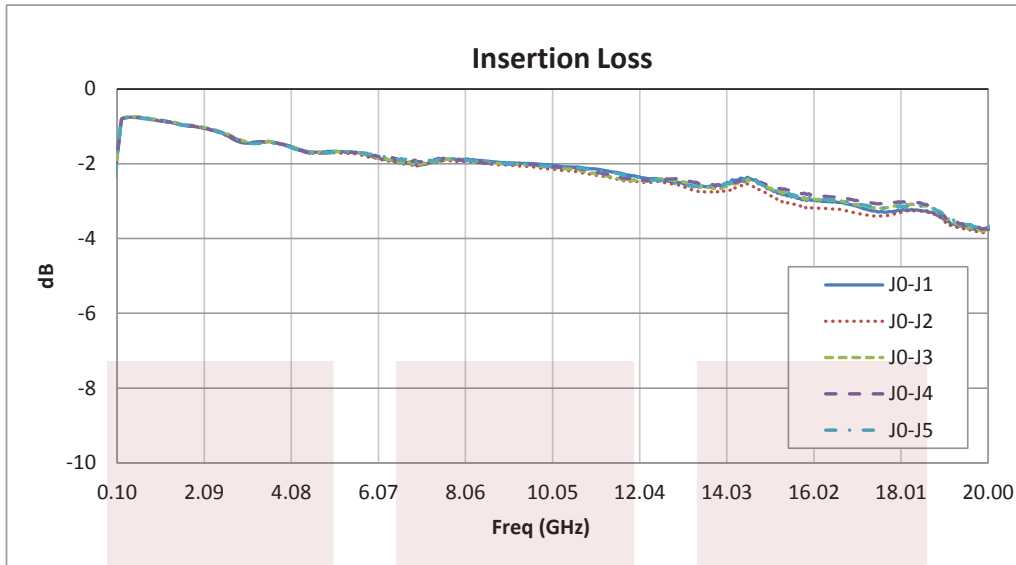
Plotted and Other Data

Notes:



Typical Performance Data



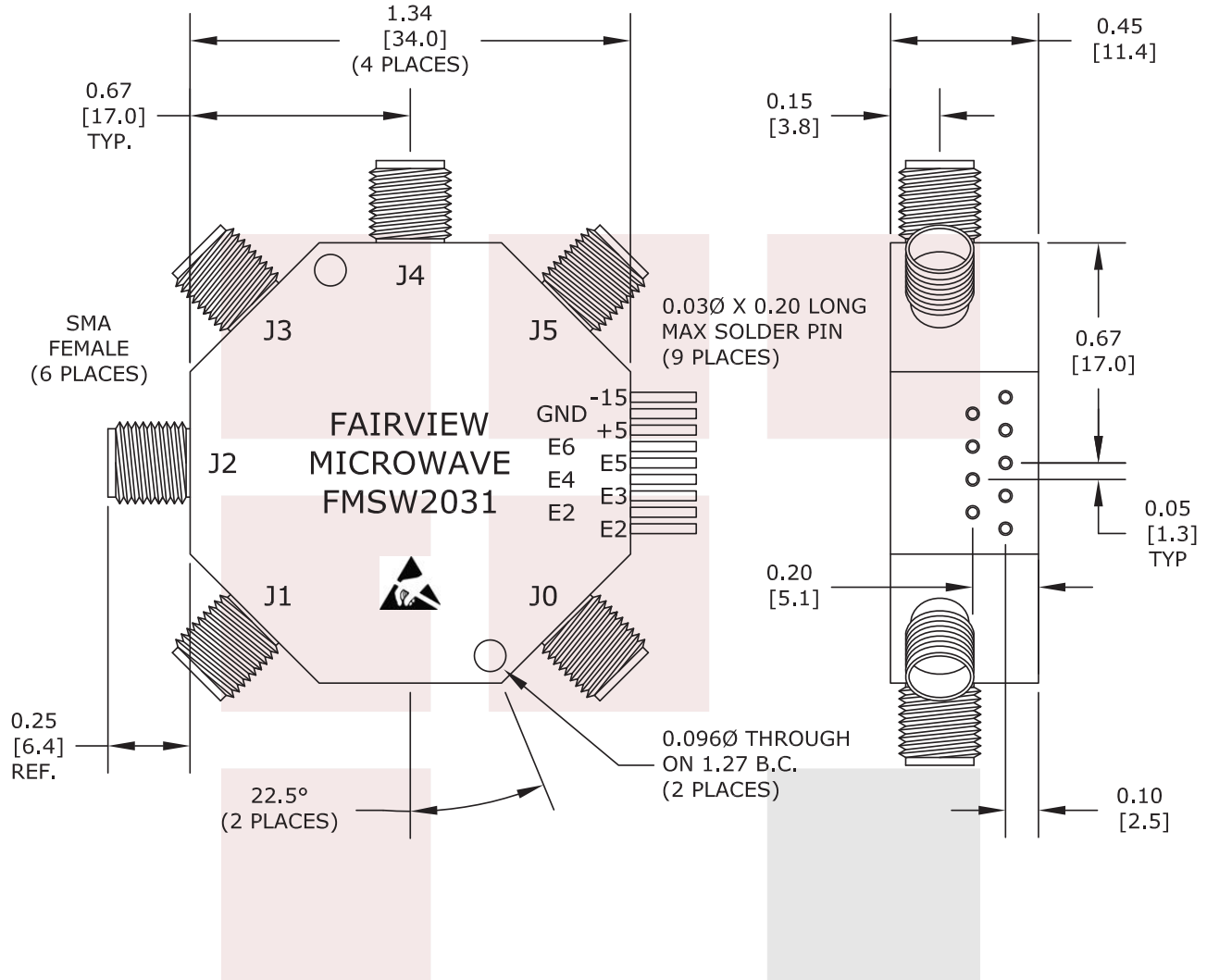


SMA PIN Diode Switch SP5T From 100 MHz to 20 GHz Rated at +27 dBm from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMA PIN Diode Switch SP5T From 100 MHz to 20 GHz Rated at +27 dBm FMSW2031](http://www.fairviewmicrowave.com/sma-pin-diode-switch-sp5t-100-mhz-20-ghz-27-dbm-fmsw2031)

URL: <http://www.fairviewmicrowave.com/sma-pin-diode-switch-sp5t-100-mhz-20-ghz-27-dbm-fmsw2031-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. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN: inches [mm]
 TOLERANCES ARE:
 X.XX ± 0.020 [± 0.508]
 X.XXX ± 0.010 [± 0.254]

* THESE DIMENSIONS AND TOLERANCES
 SUPERSEDE NOTE #1 ON TITLE BLOCK.

TTL LOGIC TABLE					
E1	E2	E3	E4	E5	Low Loss
0	1	1	1	1	J0-J1
1	0	1	1	1	J0-J2
1	1	0	1	1	J0-J3
1	1	1	0	1	J0-J4
1	1	1	1	0	J0-J5

NOTE:
 0 = LOW LOSS
 1 = ISOLATION

FAIRVIEW MICROWAVE INC.					
ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM					
TITLE		DWG NO		CAGE CODE	
SMA PIN Diode Switch SP5T From 100 MHz to 20 GHz Rated at +27 dBm		FMSW2031		3FKR5	
CAD FILE	040116	SHEET	SCALE	SIZE	2233
			N/A	A	

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].