

**SMA PIN Diode Switch SP3T From 8 GHz to 12 GHz Rated at +20 dBm**

FMSW6274 is a Single Pole Triple Throw (SP3T) Reflective PIN Diode Switch that operates from 8 GHz to 12 GHz. Typical performance includes < 2.4 dB insertion loss, > 70 dB isolation, and < 100 nsec 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 DC and -15 DC are required. The rugged package is designed to meet a series of MIL-STD-202F environmental conditions including humidity, shock, vibration, and temperature cycle. Package interfaces include solder terminals and female SMA connectors.



**Electrical Specifications**

Description	Min	Typ	Max	Units
Frequency Range	8		12	GHz
Impedance		50		Ohms
Insertion Loss		2.4		dB
Isolation	70			dB
Switching Time			100	ns
Input Power (CW)			0.1	Watts
Survival Power			1	Watts
Positive Operating Voltage		5		V
Negative Operating Voltage		-15		V
Current @ 5 V		150		mA
Current @ -15 V		75		mA
Operating Temperature	-55		+85	deg C

**Features:**

- SP3T Reflective Switch
- 8.0 GHz to 12.0 GHz
- Insertion Loss 2.4 dB typ
- Isolation 70 dB min
- Power Input 20 dBm CW max
- Field Replaceable Connectors

**Applications:**

- Test & Measurement
- Military Communication
- Commercial Communication
- Wireless Communications
- SATCOM
- Military Electronic Systems
- RF Test Stations

**Mechanical Specifications**

Length	1 in [25.4 mm]
Width	1 in [25.4 mm]
Height	0.4 in [10.16 mm]
Weight	0.1072 lbs [48.63 g]
Finish	Blue

**Configuration**

Design	SP3T, Reflective
RF Connector	SMA Female
Control Connector	Solder Pin

**Environmental Specifications**

**Temperature**

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

Humidity	MIL-STD-202F, Method 103B, Condition B
Shock	MIL-STD-202F, Method 213B, Condition B
Vibration	MIL-STD-202F, Method 204D, Condition B
Altitude	MIL-STD-202F, Method 105C, Condition B

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Temperature Cycling  
ESD Sensitivity

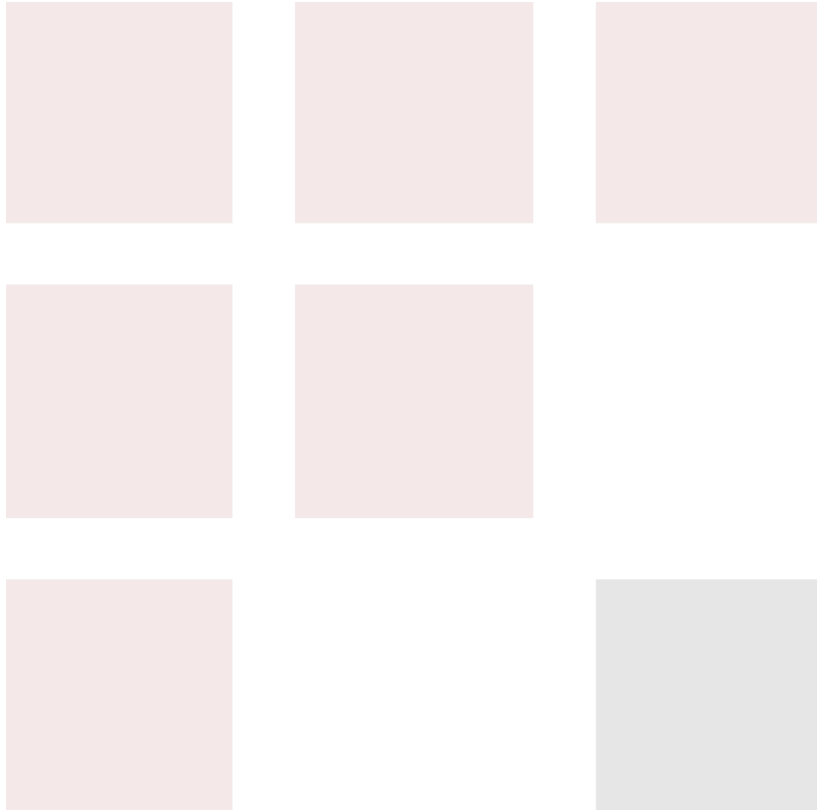
MIL-STD-202F, Method 107D, Condition A  
ESD Sensitive Material, Transport material in Approved ESD bags. Handle only  
in ESD Workstation.



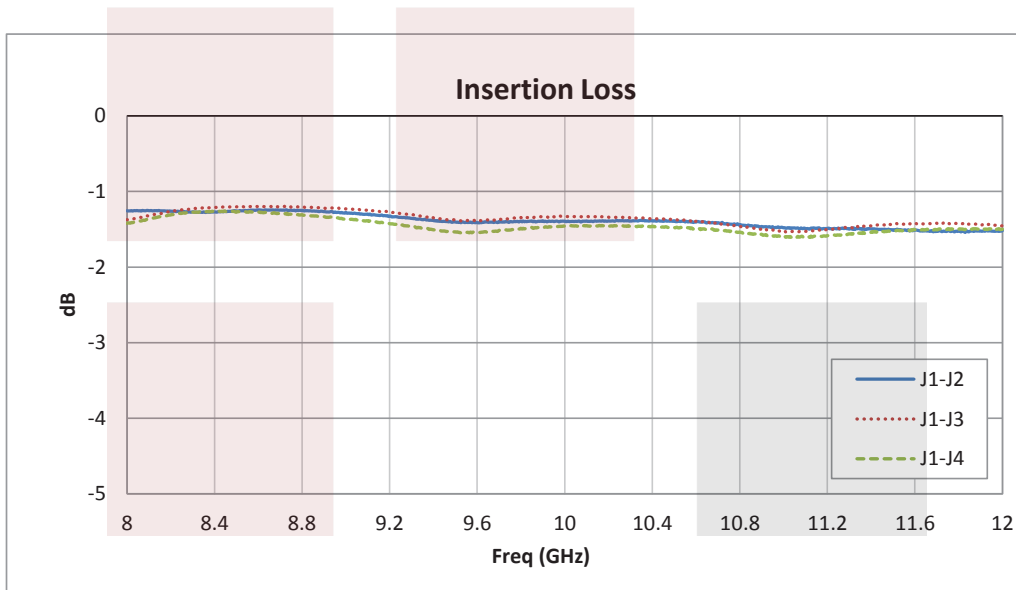
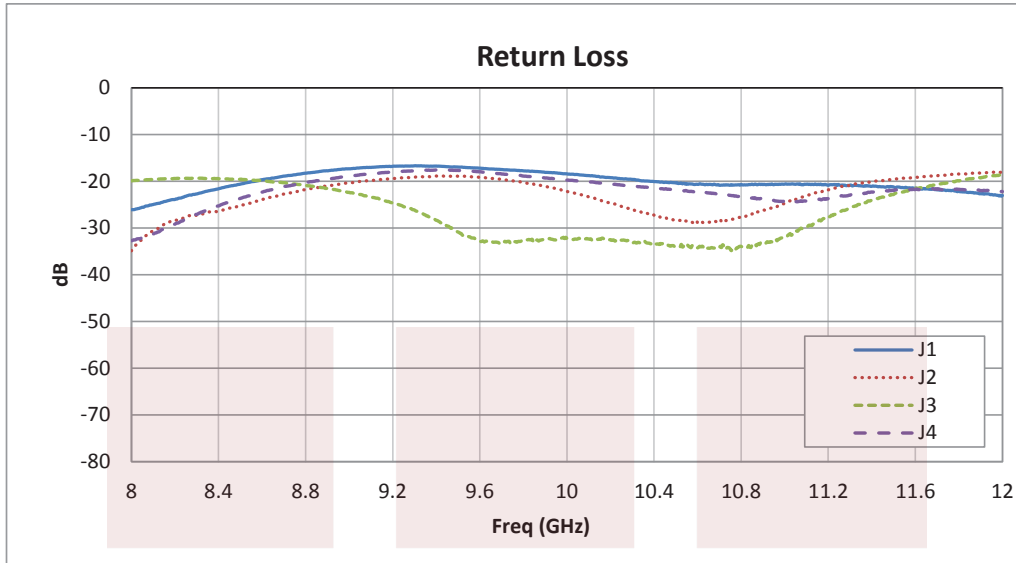
**Compliance Certifications** (visit [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com) for current document)  
REACH Compliant 12/17/2015

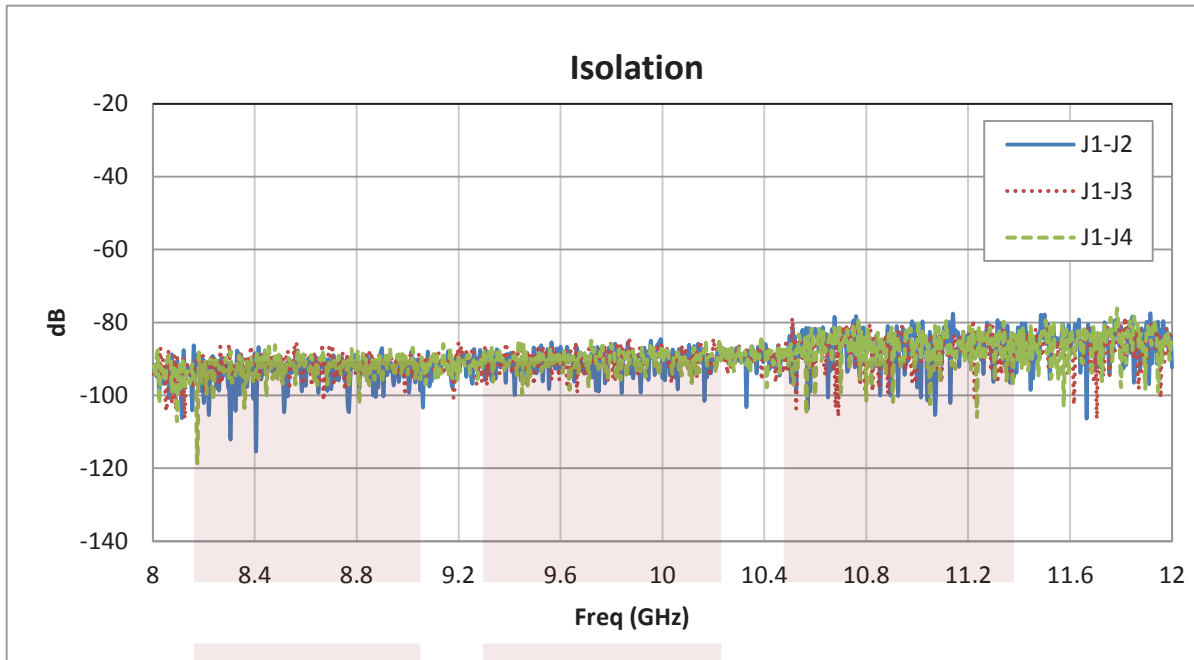
**Plotted and Other Data**

Notes:



**Typical Performance Data**





SMA PIN Diode Switch SP3T From 8 GHz to 12 GHz Rated at +20 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 SP3T From 8 GHz to 12 GHz Rated at +20 dBm FMSW6274](#)

URL: <http://www.fairviewmicrowave.com/sma-pin-diode-switch-sp3t-8-12-ghz-rated-20-dbm-fmsw6274-p.aspx>

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