

**Field Replaceable SMA PIN Diode Switch SPST  
 From 4 GHz to 8 GHz Rated at +20 dBm**

FMSW6261 is a Single Pole Single Throw (SPST) Reflective PIN Diode Switch that operates from 4.0 to 8.0 GHz. Typical Performance includes 1.5 dB insertion loss, 75 dB Isolation, and 50 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 design is compact, features field replaceable female SMA connectors, and is designed to meet MIL-STD 202F environmental test conditions which include humidity, shock, vibration, altitude, and temperature cycle.



**Electrical Specifications**

Description	Min	Typ	Max	Units
Frequency Range	4		8	GHz
Impedance		50		Ohms
Insertion Loss		1.5		dB
Isolation	75			dB
Switching Time			50	ns
Input Power (CW)			0.1	Watts
Survival Power			1	Watts
Positive Operating Voltage		5		V
Negative Operating Voltage		-15		V
Current @ 5 V		20		mA
Current @ -15 V		20		mA
Operating Temperature	-55		+85	deg C

**Mechanical Specifications**

Length	1 in [25.4 mm]
Width	1 in [25.4 mm]
Height	0.5 in [12.7 mm]
Weight	0.0642 lbs [29.12 g]
Finish	Blue

**Configuration**

Design	SPST, 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

**Features:**

- SPST Reflective Switch
- 4.0 GHz to 8.0 GHz
- Insertion Loss 1.5dB typ
- Isolation 75 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

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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.



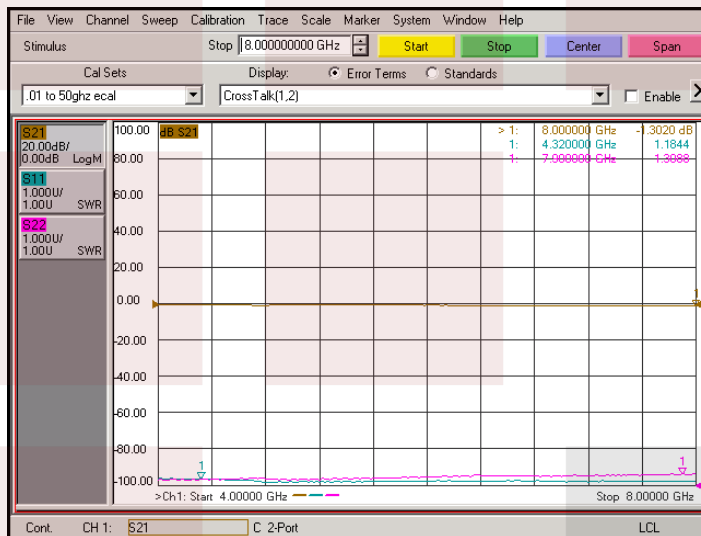
**Compliance Certifications** (visit [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com) for current document)  
 REACH Compliant 12/17/2015

**Plotted and Other Data**

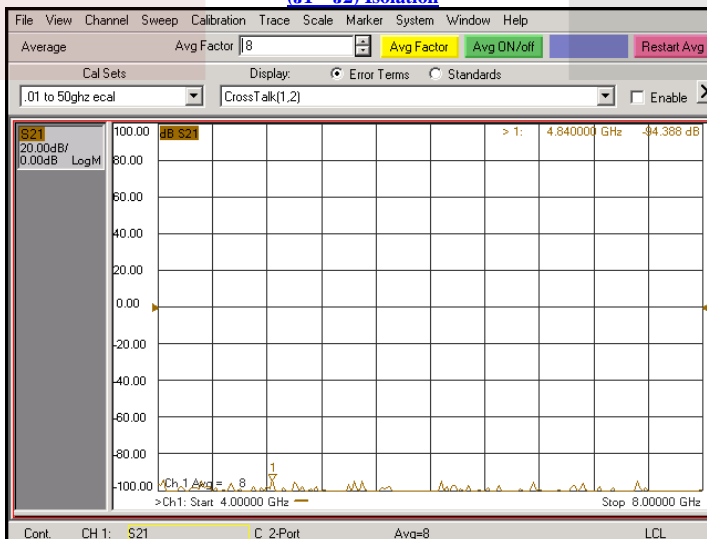
Notes:

**Typical Performance Data**

(J1 – J2) Insertion Loss and Return Loss



(J1 – J2) Isolation



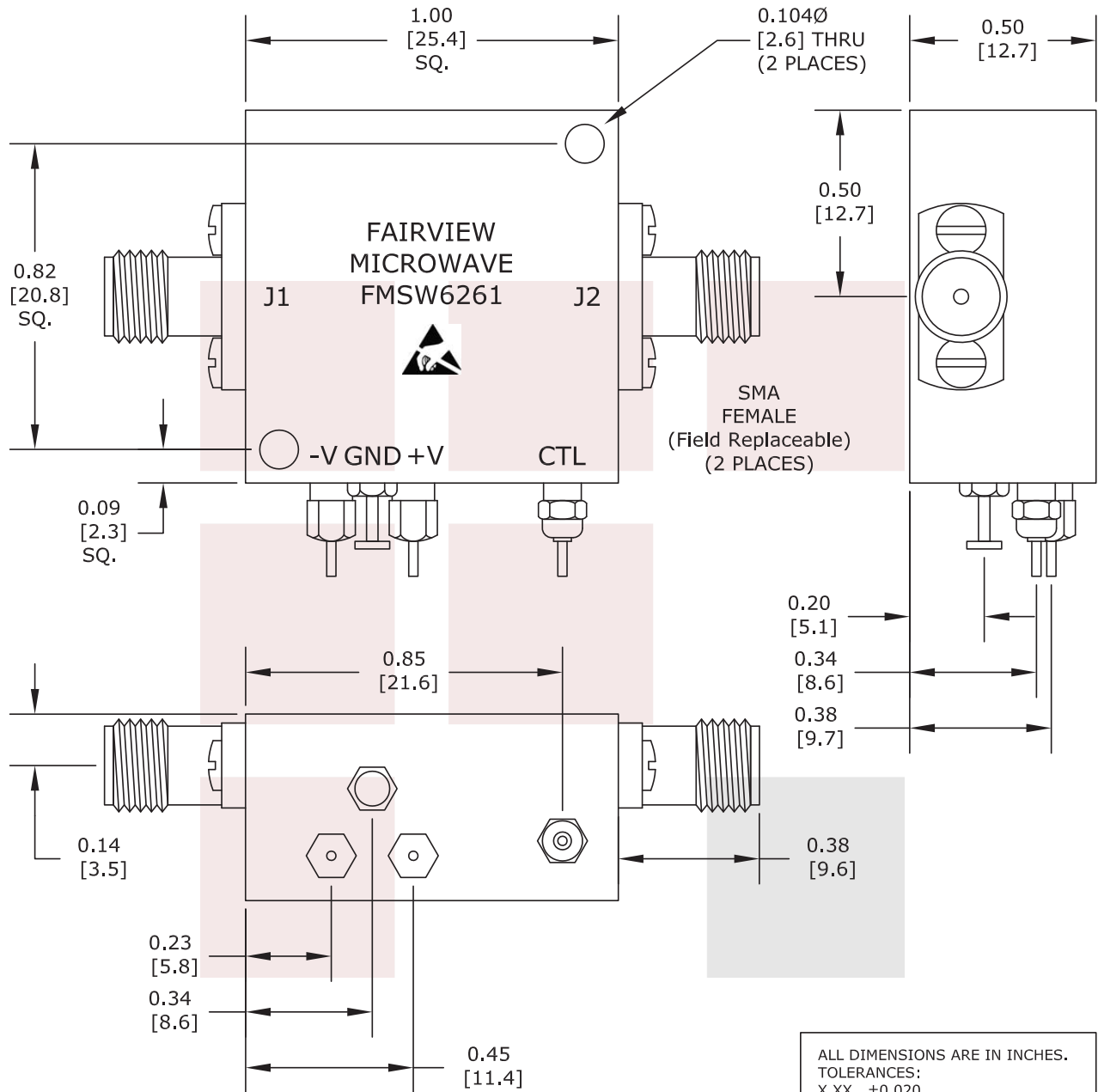
Field Replaceable SMA PIN Diode Switch SPST From 4 GHz to 8 GHz Rated at +20 dBm from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Field Replaceable SMA PIN Diode Switch SPST From 4 GHz to 8 GHz Rated at +20 dBm FMSW6261](#)

URL: <http://www.fairviewmicrowave.com/sma-pin-diode-switch-spst-4-8-ghz-20-dbm-fmsw6261-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.





ALL DIMENSIONS ARE IN INCHES.  
TOLERANCES:  
X.XX ±0.020  
X.XXX ±0.010

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

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TITLE Field Replaceable SMA PIN Diode Switch SPST From 4 GHz to 8 GHz Rated at +20 dBm		DWG NO FMSW6261		CAGE CODE 3FKR5	
CAD FILE 040816 SHEET		SCALE N/A		SIZE A 2233	