

## SMA PIN Diode Switch SPST From 1 GHz to 2 GHz Rated at +20 dBm

FMSW6259 is a SINGLE POLE SINGLE THROW (SPST) REFLECTIVE PIN DIODE SWITCH that operates from 1 GHz to 2 GHz. Outstanding typical performance includes 0.75 dB insertion loss, > 80 dB isolation, and < 50 nsec switching speed. The design incorporates TTL compatible driver circuitry for accurate logic control. Operational temperature range is -55oC to +85oC and dual voltage controls of +5 Vdc and -15 Vdc 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	1		2	GHz
Impedance		50		Ohms
Insertion Loss		0.75		dB
Isolation	80			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]
Finish	Blue

### Configuration

Package Type	Connectorized Module
Design	SPST, Reflective
RF Connector	SMA Female
Control Connector	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
- 1.0 GHz to 2.0 GHz
- Insertion Loss 0.75 dB typ
- Isolation 80 dB min
- Power Input 20 dBm CW max

### Applications:

- Test & Measurement
- Military Communication
- Commercial Communication

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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.

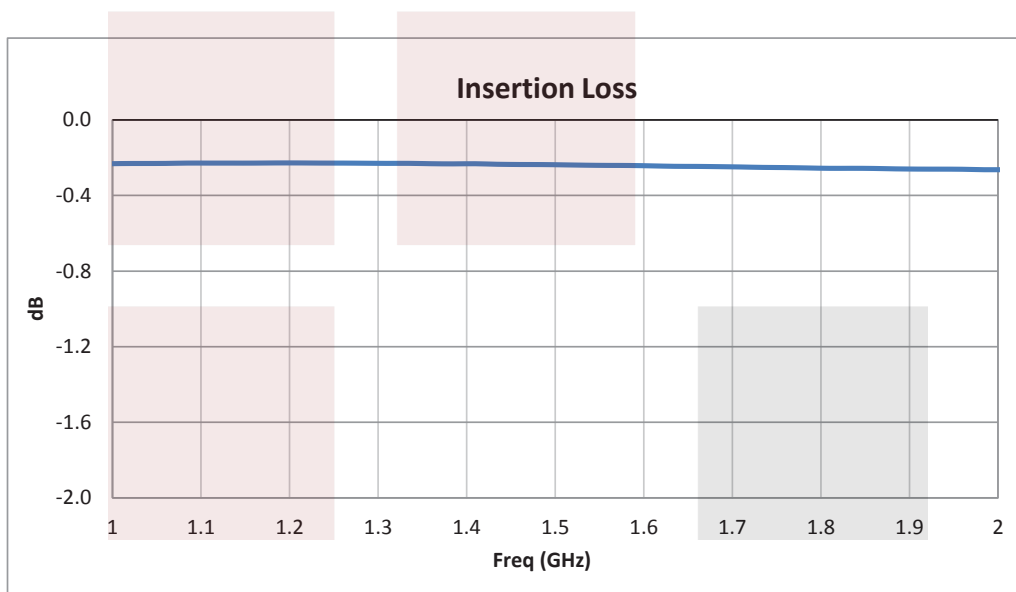
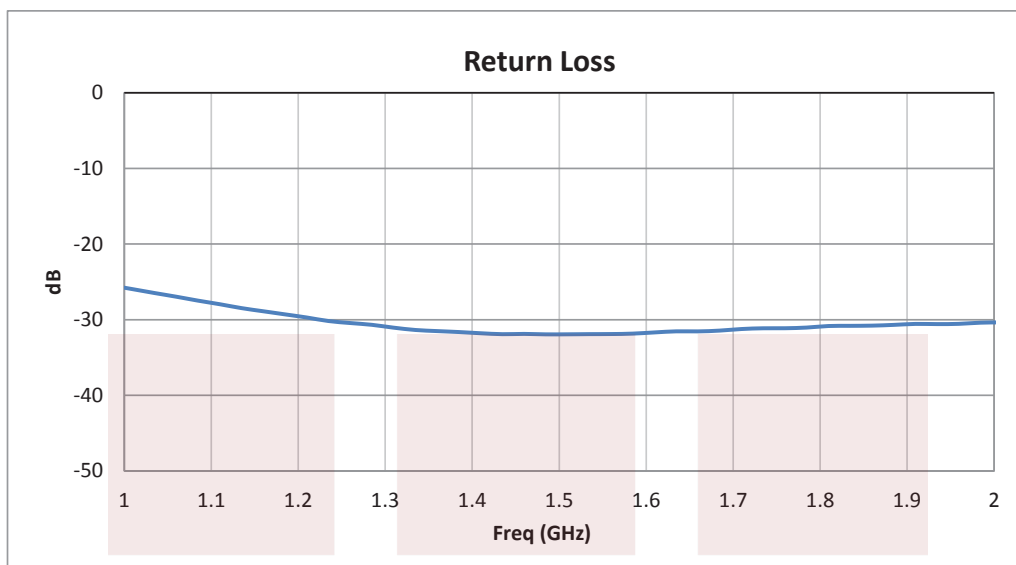


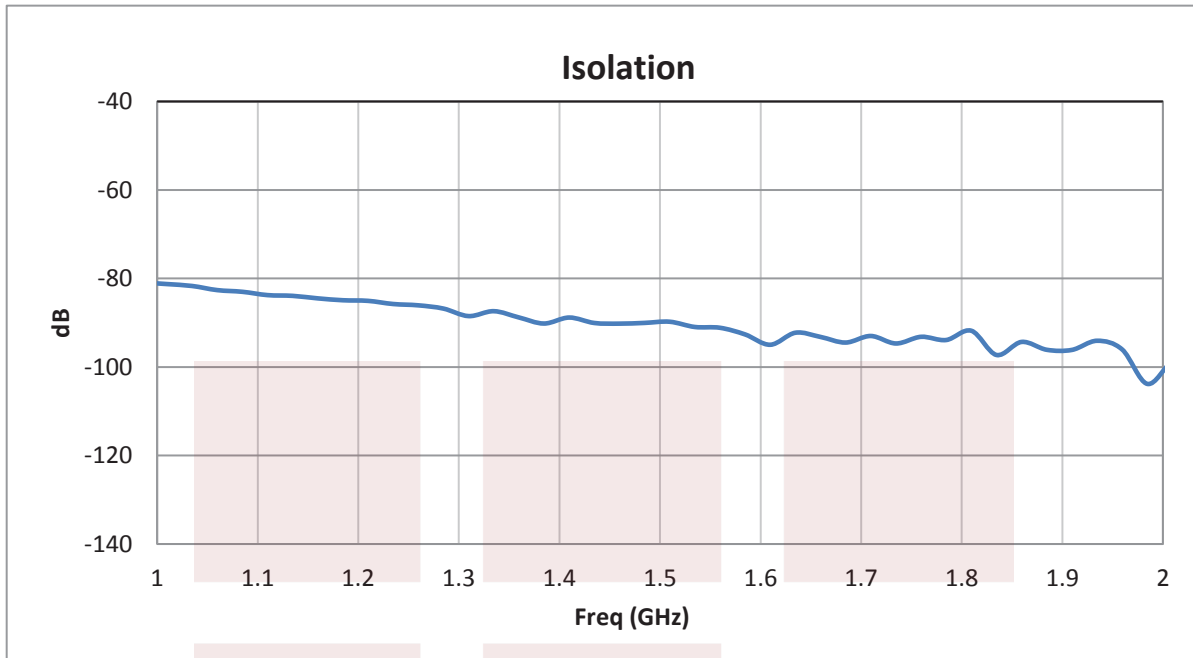
**Compliance Certifications** (visit [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com) for current document)  
 REACH Compliant 12/17/2015

**Plotted and Other Data**

Notes:


**Typical Performance Data**



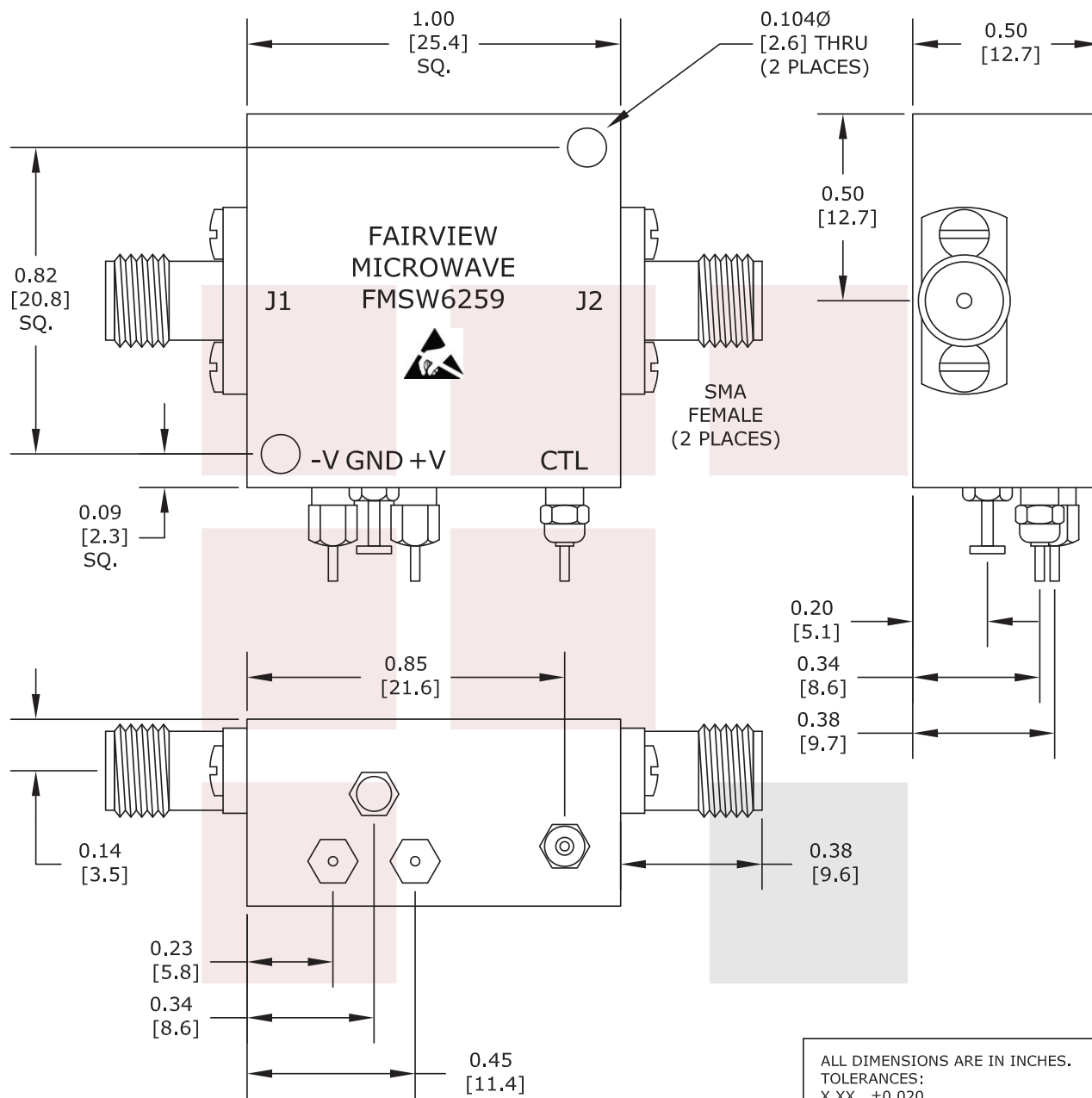


SMA PIN Diode Switch SPST From 1 GHz to 2 GHz Rated at +20 dBm from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMA PIN Diode Switch SPST From 1 GHz to 2 GHz Rated at +20 dBm FMSW6259](http://www.fairviewmicrowave.com/sma-pin-diode-switch-spst-1-2-ghz-rated-20-dbm-fmsw6259-p.aspx)

URL: <http://www.fairviewmicrowave.com/sma-pin-diode-switch-spst-1-2-ghz-rated-20-dbm-fmsw6259-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.

<b>FAIRVIEW MICROWAVE INC.</b> ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		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].			
TITLE SMA PIN Diode Switch SPST From 1 GHz to 2 GHz Rated at +20 dBm		DWG NO <b>FMSW6259</b>		CAGE CODE <b>3FKR5</b>	
CAD FILE	020316	SHEET	SCALE	N/A	SIZE A 2233