

**1.85mm SPST PIN Diode Switch Absorptive**  
**From 50 MHz to 67 GHz Rated at +27 dBm**

The FMSW2024 is a Single Pole Single Throw (SPST) Absorptive PIN Diode Switch that operates from 0.05 to 67 GHz. The output port is terminated in 50 ohms when switched in the isolation (off) state. Electrical performance includes 9.5 dB max insertion loss, -4 dB max return loss, 25 dB min isolation, and 150 nsec max switching speed. The design incorporates TTL-compatible driver circuitry for accurate logic control. Operational temperature range is -30°C to +60°C and dual voltage controls of +5 Vdc and -5 Vdc are required. The package interface uses solder terminals and 1.85mm Female connectors.



**Electrical Specifications**

Description	Min	Typ	Max	Units
Frequency Range	0.05		67	GHz
Impedance		50		Ohms
Return Loss			-4	dB
Insertion Loss			9.5	dB
Isolation	25			dB
Switching Time			150	ns
Input Power (CW)			0.5	Watts
Positive Operating Voltage		5		Vdc
Negative Operating Voltage		-5		Vdc
Current @ 5 Vdc		50		mA
Current @ -5 Vdc		50		mA
Operating Temperature	-30		+60	deg C

Electrical Specification Notes:  
 Specified switching time includes TTL driver delay.

**Mechanical Specifications**

Length	1 in [25.4 mm]
Width	1 in [25.4 mm]
Height	0.5 in [12.7 mm]
Weight	0.083 lbs [37.65 g]
Design	Absorptive, SPST
RF Connector	1.85mm Female
Control Connector	Solder Pin

**Environmental Specifications**

**Temperature**

Operating Range	-30 to +60 deg C
ESD Sensitivity	ESD Sensitive Material. Transport material in Approved ESD bags. Handle only in ESD Workstation.



**Features:**

- SPST Absorptive Switch
- 0.05 GHz to 67 GHz
- Insertion Loss 9.5 dB max
- Isolation 25 dB min
- Power Input +27 dBm CW max

**Applications:**

- Test & Measurement
- Military Communication
- Commercial Communication

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

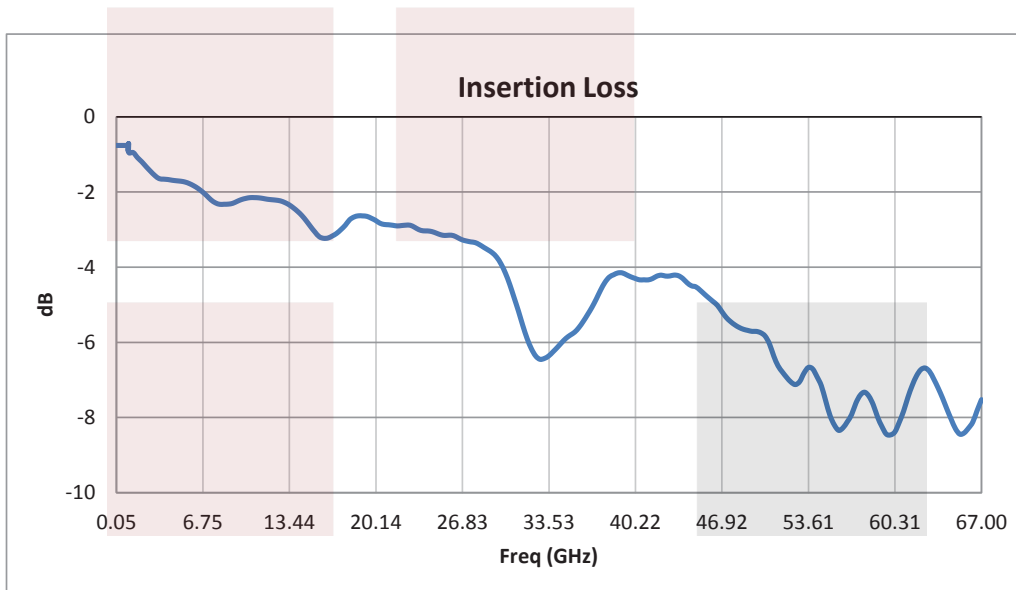
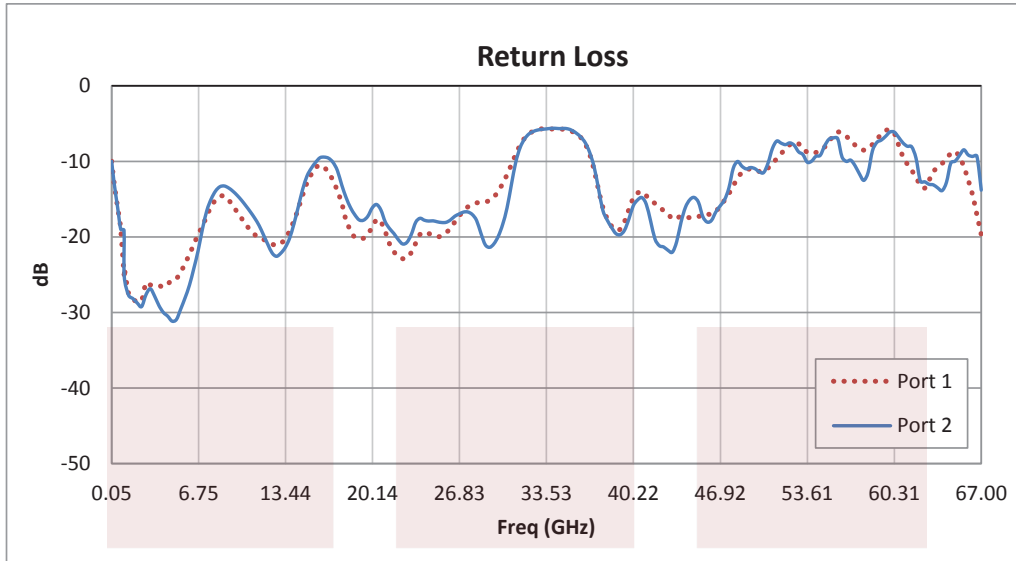
**Compliance Certifications** (visit [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com) for current document)

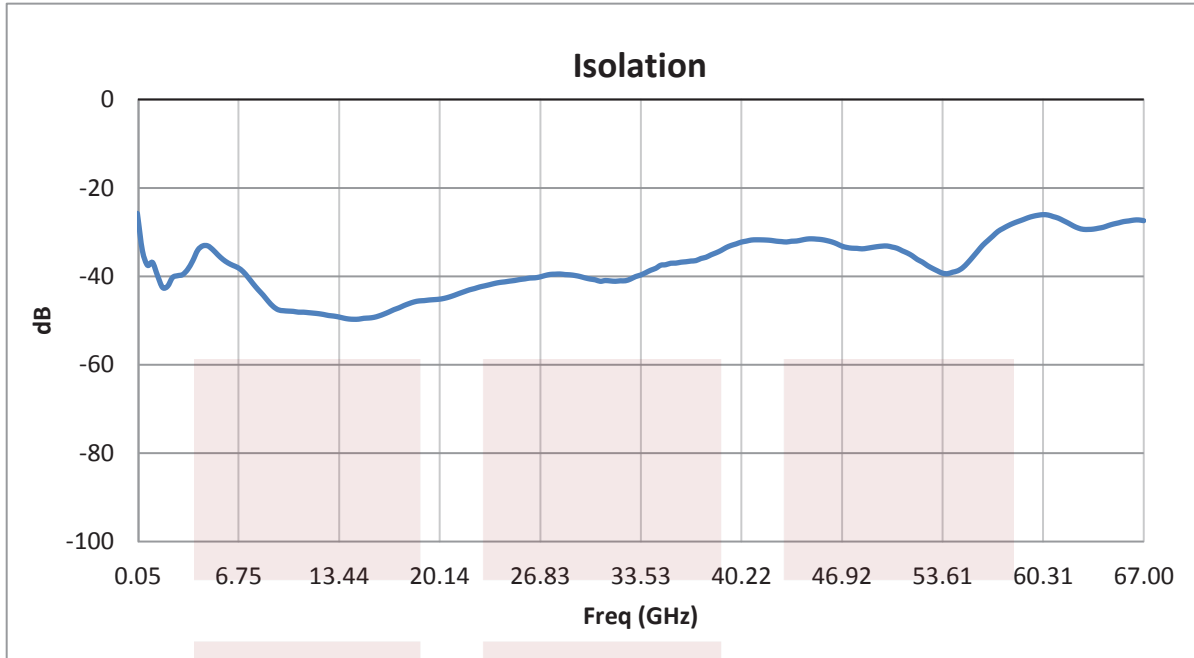
**Plotted and Other Data**

Notes:



**Typical Performance Data**



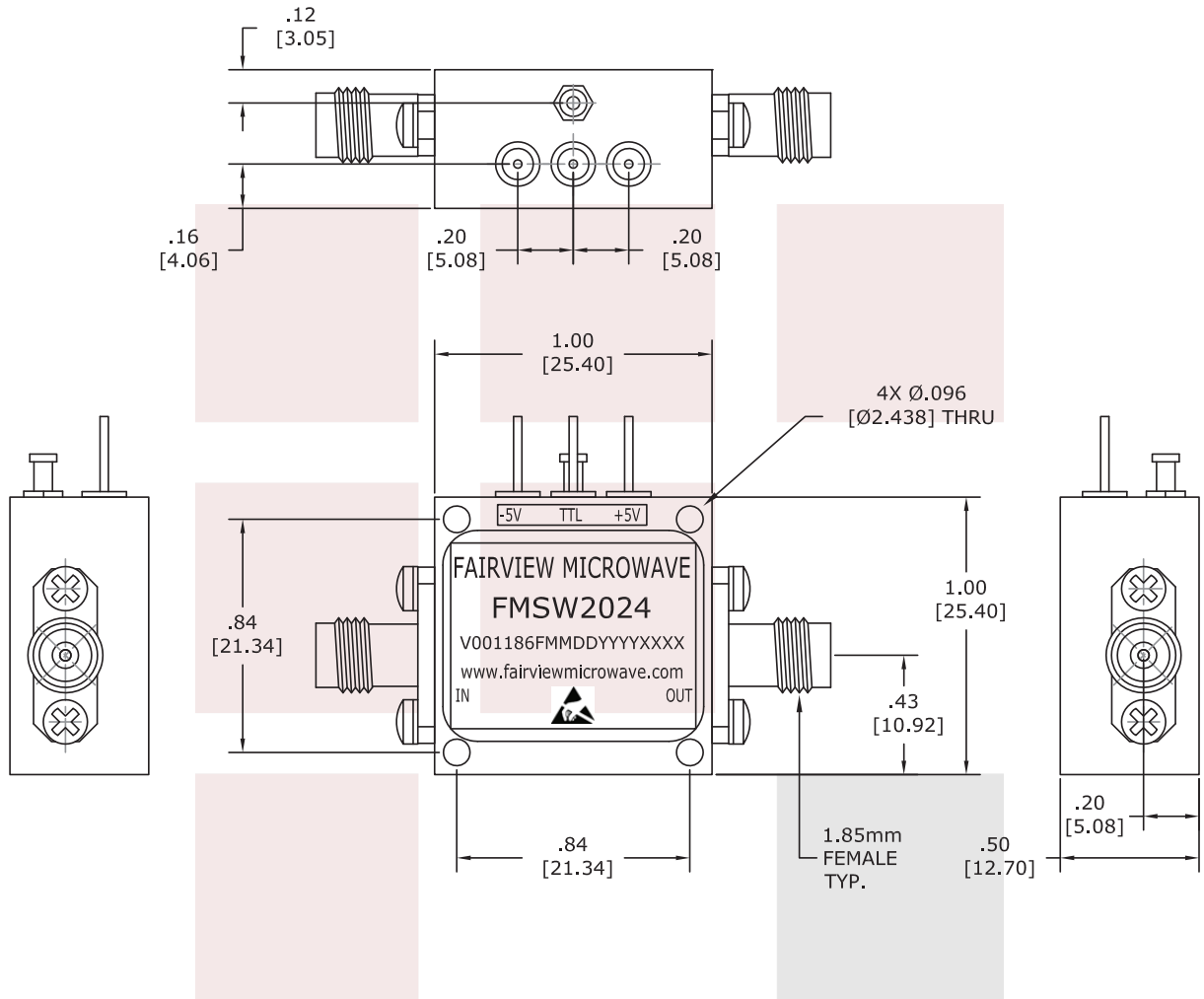


1.85mm SPST PIN Diode Switch Absorptive From 50 MHz to 67 GHz Rated at +27 dBm from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [1.85mm SPST PIN Diode Switch Absorptive From 50 MHz to 67 GHz Rated at +27 dBm FMSW2024](https://www.fairviewmicrowave.com/1.85mm-spst-pin-diode-switch-absorptive-67-ghz-27-dbm-fmsw2024-p.aspx)

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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  
 TOLERANCES ARE: [mm]  
 .XX ± .01 [±.25]  
 .XXX ± .001 [±.025]

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

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TITLE 1.85mm SPST PIN Diode Switch Absorptive From 50 MHz to 67 GHz Rated at +27 dBm		DWG NO FMSW2024		CAGE CODE 3FKR5	
CAD FILE	113015	SHEET	SCALE	N/A	SIZE A 2233