

**2.92mm PIN Diode Switch SPDT From  
 2 GHz to 40 GHz Rated at +27 dBm**

The FMSW2022 is an SPDT ABSORPTIVE PIN DIODE SWITCH that operates over a wide frequency band from 2 to 40 GHz. J1 and J2 ports are terminated in 50 ohms when switched in the isolation (off) state. Electrical performance includes max. insertion loss of 5.5dB, max. return loss of -5dB, min. isolation of 55dB, and max. switching speed of 100nsec. TTL-compatible driver circuitry is included for accurate logic control. The design requires dual voltage controls of +5 Vdc and -5 Vdc, with an operational temperature range of -30°C to +60°C. External connectors include solder terminals and 2.92mm female connectors.



**Electrical Specifications**

Description	Min	Typ	Max	Units
Frequency Range	2		40	GHz
Impedance		50		Ohms
Return Loss			-5	dB
Insertion Loss			5.5	dB
Isolation	55			dB
Switching Time			100	ns
Input Power (CW)			0.5	Watts
Positive Operating Voltage		5		V
Negative Operating Voltage		-5		V
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	1.2 in [30.48 mm]
Height	0.6 in [15.24 mm]
Package Type	Connectorized Module
Design	SPDT, Absorptive
RF Connector	2.92mm Female
Control Connector	2.92mm Female

**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.



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

**Plotted and Other Data**

Notes:

**Features:**

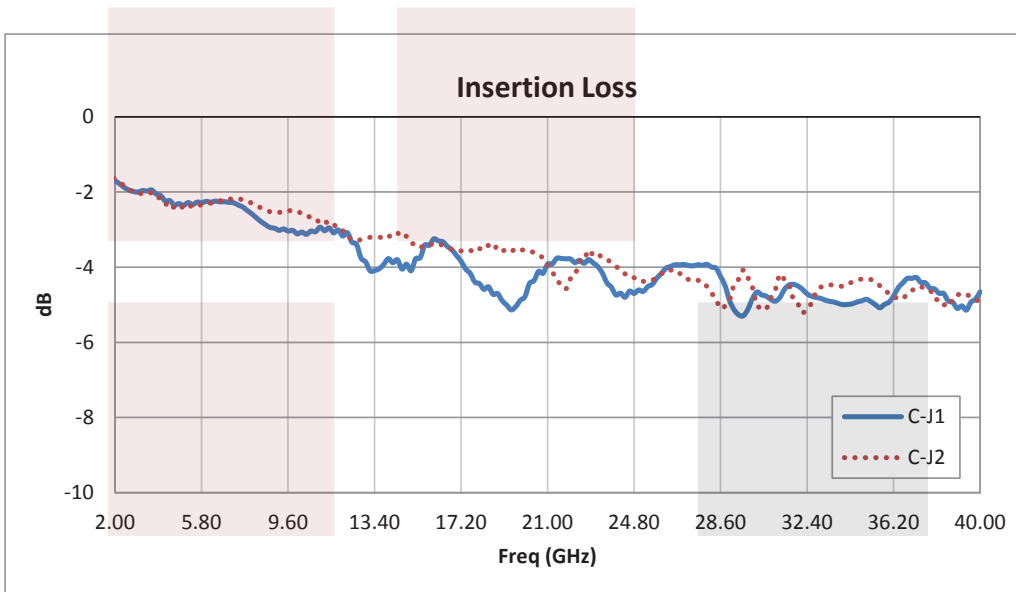
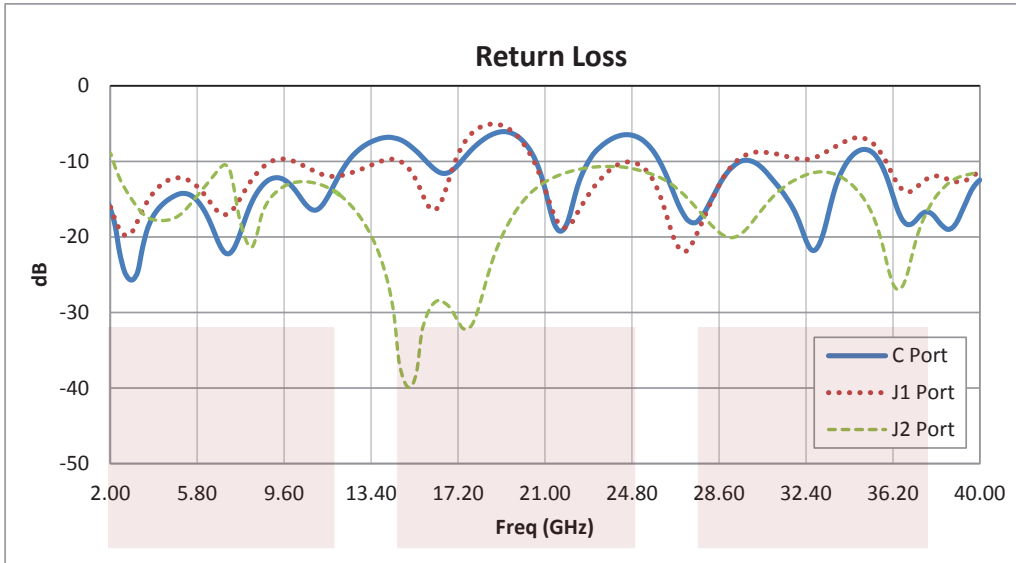
- SPDT Absorptive Switch
- 2 GHz to 40 GHz
- Insertion Loss 5.5 dB max
- Isolation 55 dB min
- Power Input +27 dBm CW max

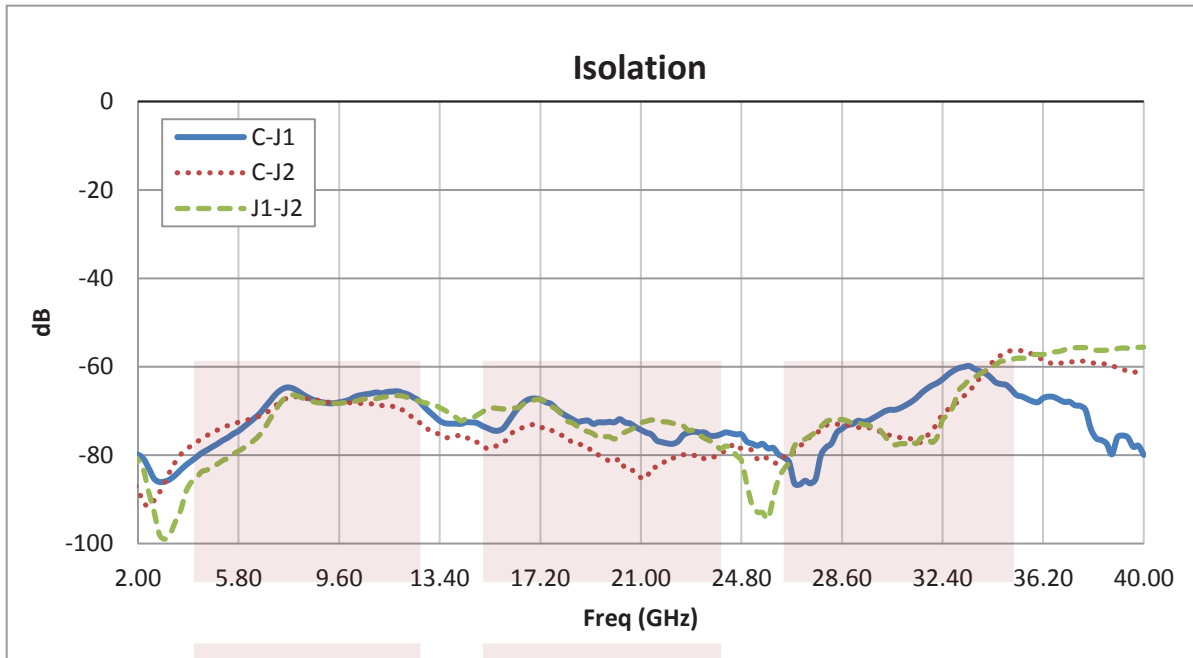
**Applications:**

- 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)

**Typical Performance Data**



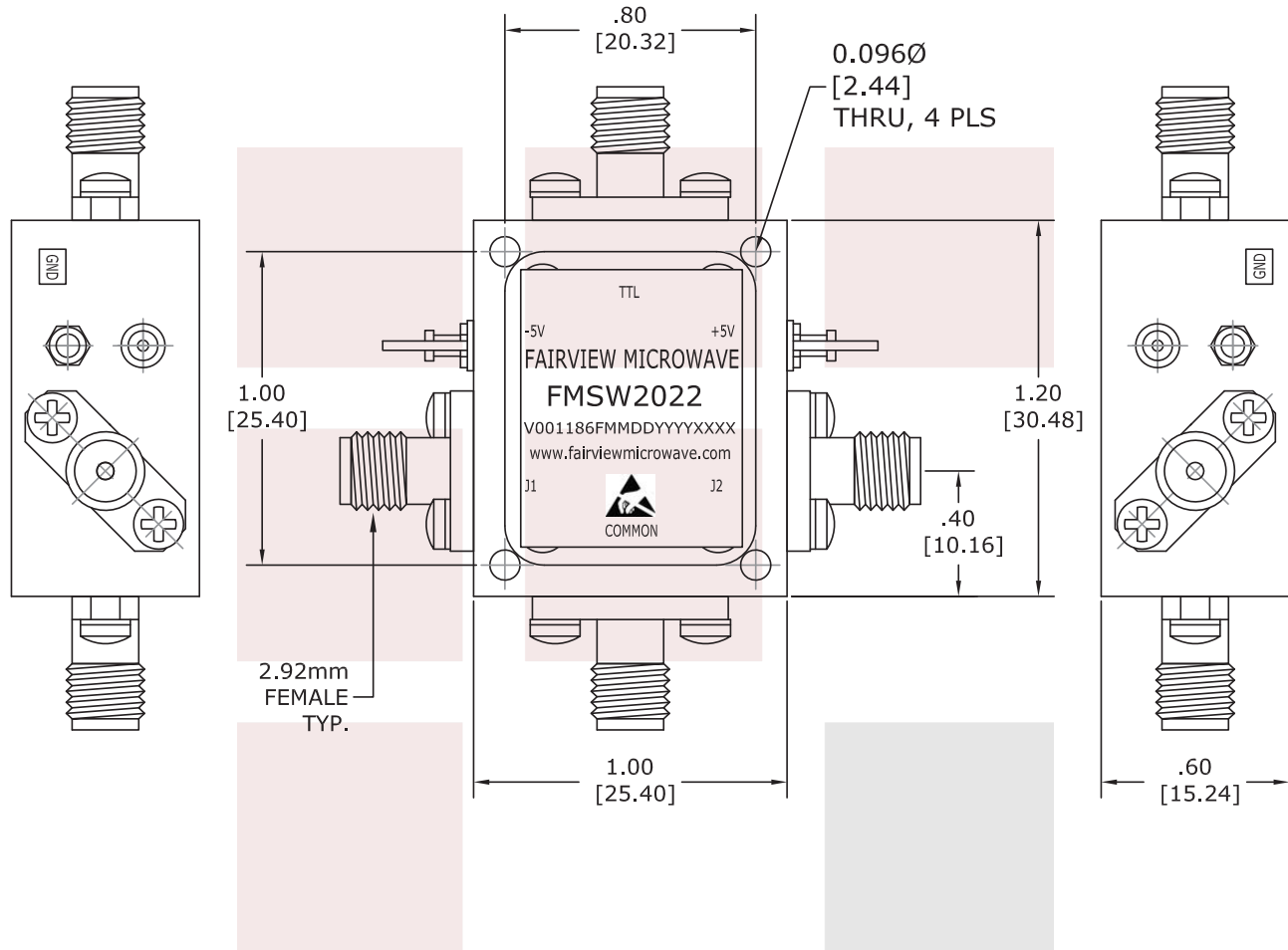


2.92mm PIN Diode Switch SPDT From 2 GHz to 40 GHz Rated at +27 dBm from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [2.92mm PIN Diode Switch SPDT From 2 GHz to 40 GHz Rated at +27 dBm FMSW2022](http://www.fairviewmicrowave.com/2.92mm-pin-diode-switch-spdt-2-40-ghz-rated-27-dbm-fmsw2022-p.aspx)

URL: <http://www.fairviewmicrowave.com/2.92mm-pin-diode-switch-spdt-2-40-ghz-rated-27-dbm-fmsw2022-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.



LOGIC TABLE		
TTL LOGIC	LOW LOSS	ISOLATION
HIGH	C-J2	C-J1
LOW	C-J1	C-J2

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.

<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 2.92mm PIN Diode Switch SPDT From 2 GHz to 40 GHz Rated at +27 dBm		DWG NO FMSW2022		CAGE CODE 3FKR5
CAD FILE	102615	SHEET	SCALE N/A	SIZE A 2233