

SMA SPDT PIN Diode Switch from 30 MHz to 530 MHz Rated at 5 Watts

The FMSW2047 is a Single Pole Double Throw (SPDT) PIN Diode Switch that operates over a frequency band from 30 to 530 MHz. Electrical performance includes max insertion loss of 1.0 dB, min isolation of 50 dB, and max switching speed of 0.15 μ s. The design requires voltage controls of +5 Vdc, with an operational temperature range of -40°C to +85°C. External connectors include solder terminals and Field Replaceable SMA female connectors. Conforms to MIL-STD for Shock, Vibration, Altitude, and Humidity.

Electrical Specifications

TTL Control Logic

Off/Isolation: "0"
On/Low Loss: "1"

Description	Min	Typ	Max	Units
Frequency Range	30		530	MHz
Impedance		50		Ohms
VSWR		1.2:1	1.5:1	
Insertion Loss			1	dB
Isolation		60		dB
Switching Time		150	200	ns
Input Power (CW)			5	Watts
Current		1		mA
Operating Temperature	-40		+85	deg C

Mechanical Specifications

Weight	0.093 lbs [42.18 g]
Design	Reflective, SPDT
RF Connector	SMA Female
Control Connector	Solder Pin

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
Storage Range	-55 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

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:



Features:

- SPDT Reflective Switch
- 30 MHz to 530 MHz
- Insertion Loss 1.0 dB max
- Isolation 50 dB
- Power Input +37 dBm CW max
- Switching Time: 0.15 μ s
- Field replaceable SMA connectors
- Mil Spec Compliant

Applications:

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

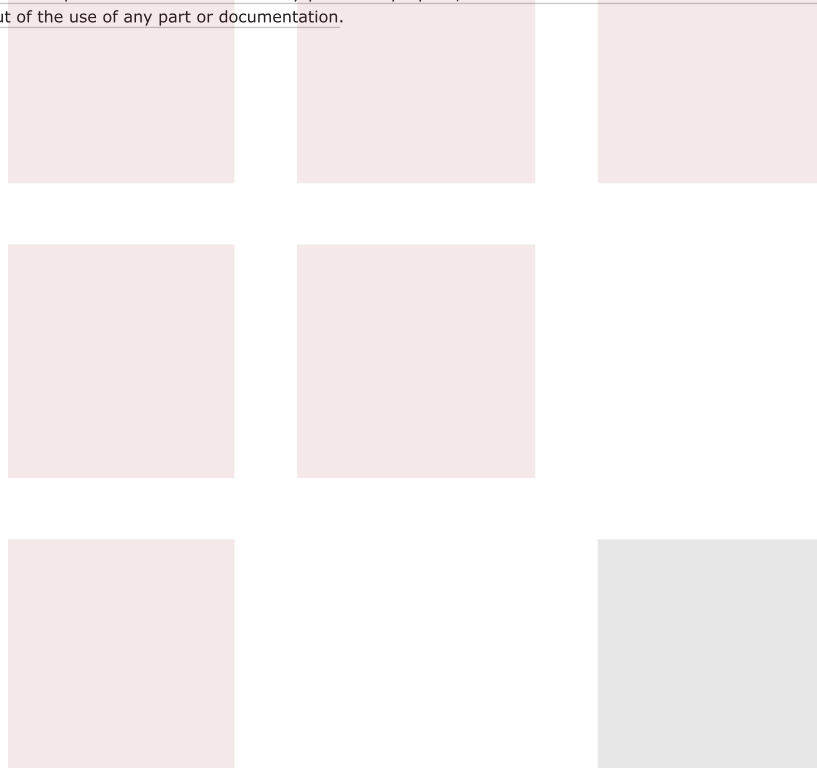
Fairview Microwave
301 Leora Ln., Suite 100
Lewisville, TX 75056
Tel: 1-800-715-4396 / (972) 649-6678
Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

SMA SPDT PIN Diode Switch from 30 MHz to 530 MHz Rated at 5 Watts 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 Lewisville, Texas. Fairview Microwave is RF on-demand.

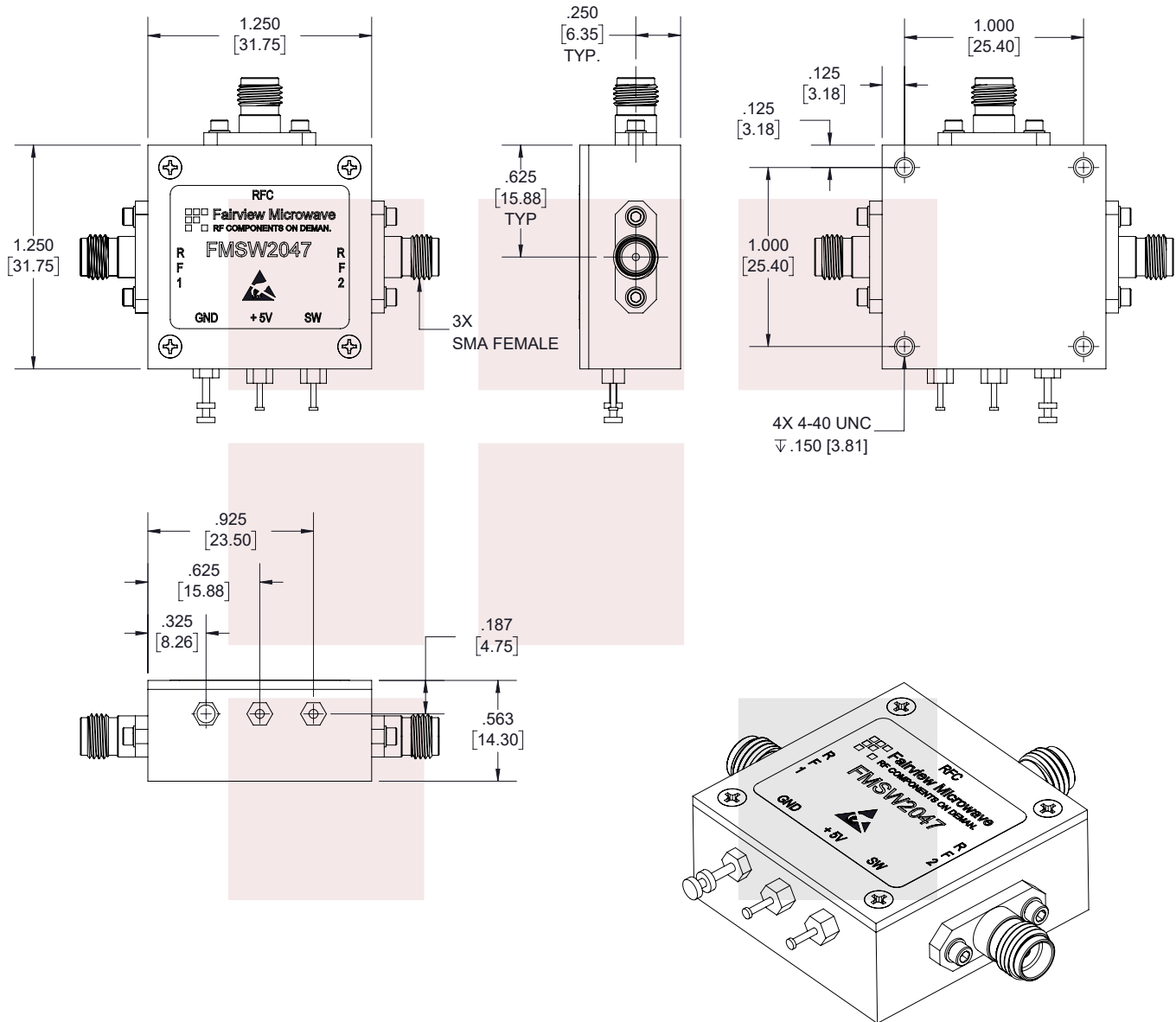
For additional information on this product, please click the following link: [SMA SPDT PIN Diode Switch from 30 MHz to 530 MHz Rated at 5 Watts FMSW2047](#)

URL: <https://www.fairviewmicrowave.com/sma-spdt-pin-diode-switch-530-mhz-5-watts-fmsw2047-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.



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PCR FMSW2047	6/15/2020	T.GALLA



THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.



TITLE
SMA SPDT PIN Diode Switch from 30 MHz to 530 MHz
Rated at 5 Watts

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS			THIRD-ANGLE PROJECTION	
TOLERANCES:		CABLE LENGTH (L) TOLERANCES:		
.X = ±.2 [5.08] FRACTIONS		L ≤ 12 [305] = +1 [25] / -0		
.XX = ±.02 [.51] ± 1/32		12 [305] < L ≤ 60 [1524] = +2 [51] / -0		
.XXX = ±.005 [.13] ANGLES ± 1°		60 [1524] < L ≤ 120 [3048] = +4 [102] / -0		
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0		
		300 [7620] < L = +5% / -0		
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.			SCALE	
			N/A	
SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	3FKR5	K.Dang	FMSW2047	A

T-Rev.D