

SMA SPDT PIN Diode Switch Absorptive from 800 MHz to 2.7 GHz Rated at 100 Watts

The FMSW2041 is a single pole double throw (SPDT) terminated PIN diode switch that operates over the frequency range of 800 MHz to 2700 MHz. The 50 ohm design supports TTL control logic and is rated up to 100 Watts average RF input power. Typical performance includes 1.2 dB insertion loss and greater than 60 dB isolation. Switching speed is 10 microseconds with 1.4:1 typical VSWR and an operating voltage of +15 Vdc with 80 mA nominal current. The rugged package design supports SMA Female RF input/output connectors. The Switch design is highly reliable with an operational temperature of 0°C to +70°C.

Electrical Specifications

TTL Control Logic

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

Description	Min	Typ	Max	Units
Frequency Range	0.8		2.7	GHz
Impedance		50		Ohms
VSWR			1.4:1	
Insertion Loss		0.8		dB
Switching Time		6	10	us
Input Power (CW)			100	Watts
Power In, Hot Switching (CW)			30	Watts
Positive Operating Voltage		15		Vdc
Current @ 15 Vdc		80		mA
Operating Temperature	0		+70	deg C

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	0.8 to 2	2 to 2.7				GHz
Insertion Loss, Max	1	1.2				dB
Insertion Loss, Typ	0.6	0.8				dB
Isolation, Min	65	60				dB
Isolation, Typ	75	70				dB

Mechanical Specifications

Weight	0.613 lbs [278.05 g]
Design	Absorptive, SPDT
RF Connector	SMA Female

Environmental Specifications

Temperature	
Operating Range	0 to +70 deg C
Storage Range	-55 to +90 deg C



Features:

- SPDT PIN Diode Switch
- Terminated
- 800 to 2700 MHz Bandwidth
- Insertion loss: 1.2 dB max
- Isolation: 60 dB min
- 50 Ohms
- Switching Speed: 10 microseconds
- DC voltage: +15 Vdc
- SMA female connectors
- TTL Control Logic

Applications:

- Electronic Warfare
- Test & Measurement
- Military and Wireless Communications Systems
- Military & Space
- Radar

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

ESD Sensitivity

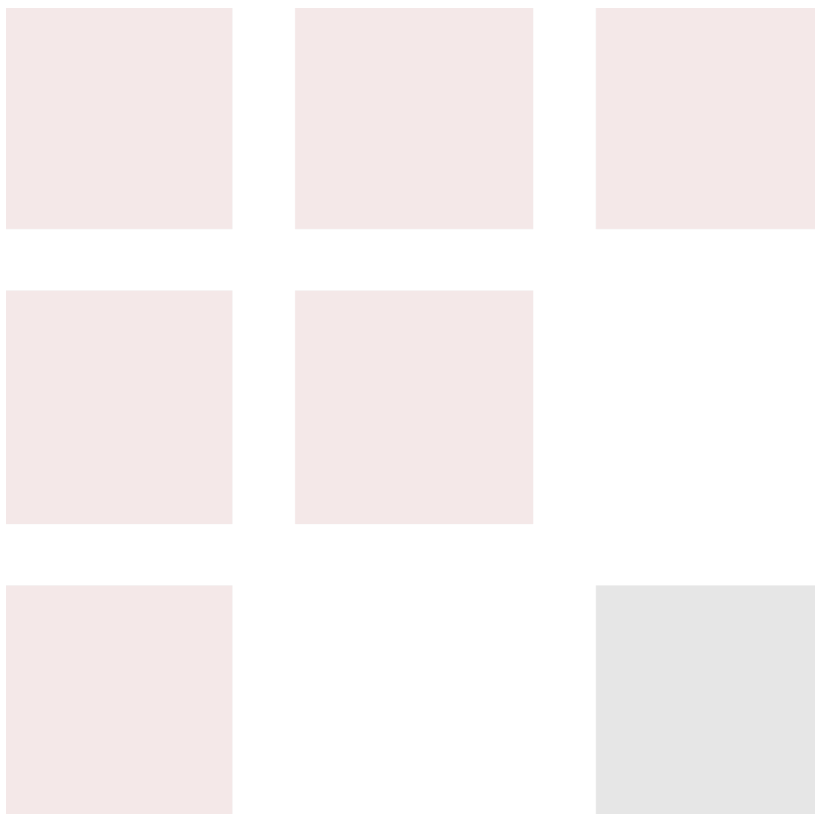
ESD Sensitive Material. Transport material in Approved ESD bags. Handle only in ESD Workstation.



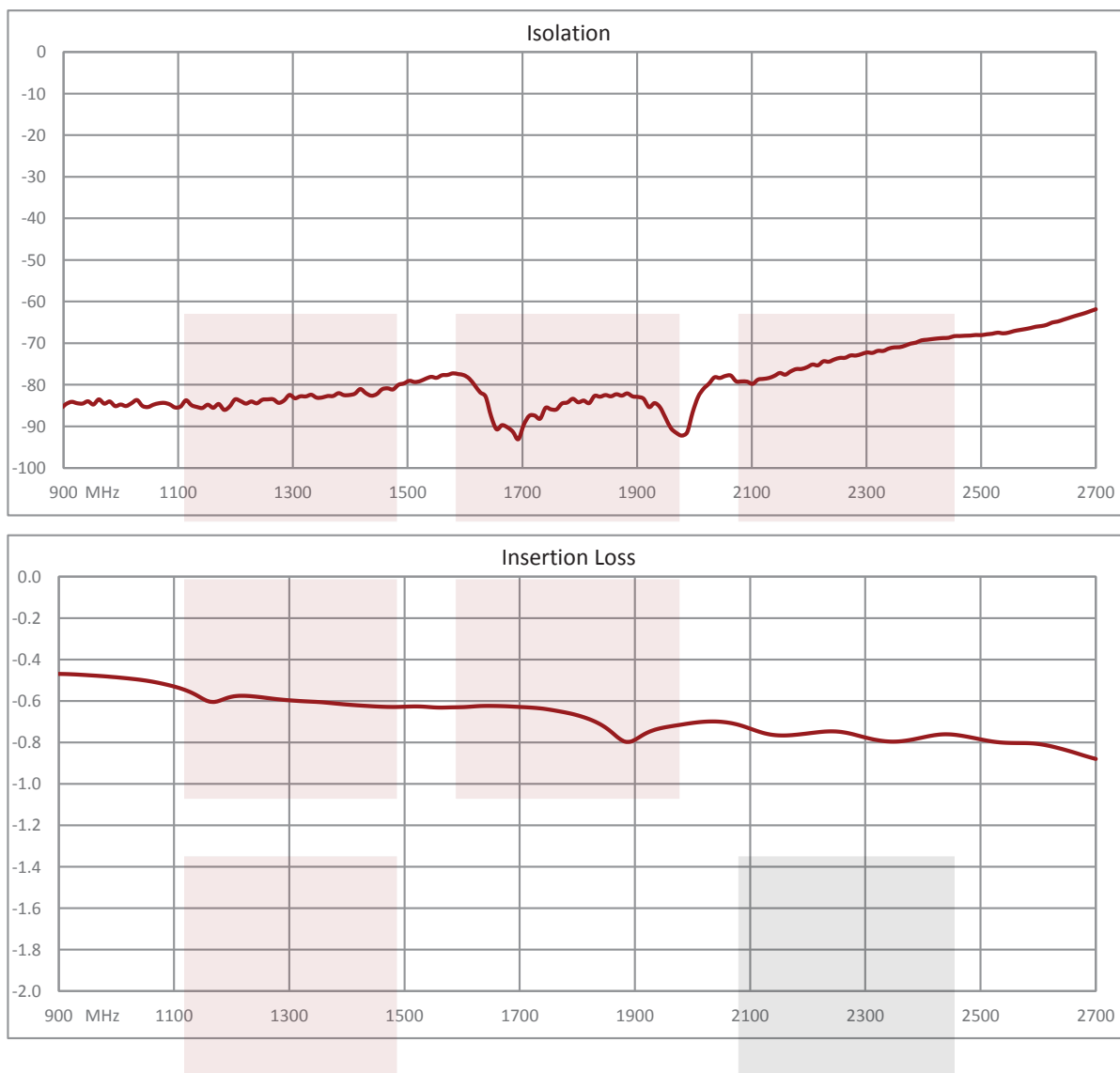
Compliance Certifications (see [product page](#) for current document)

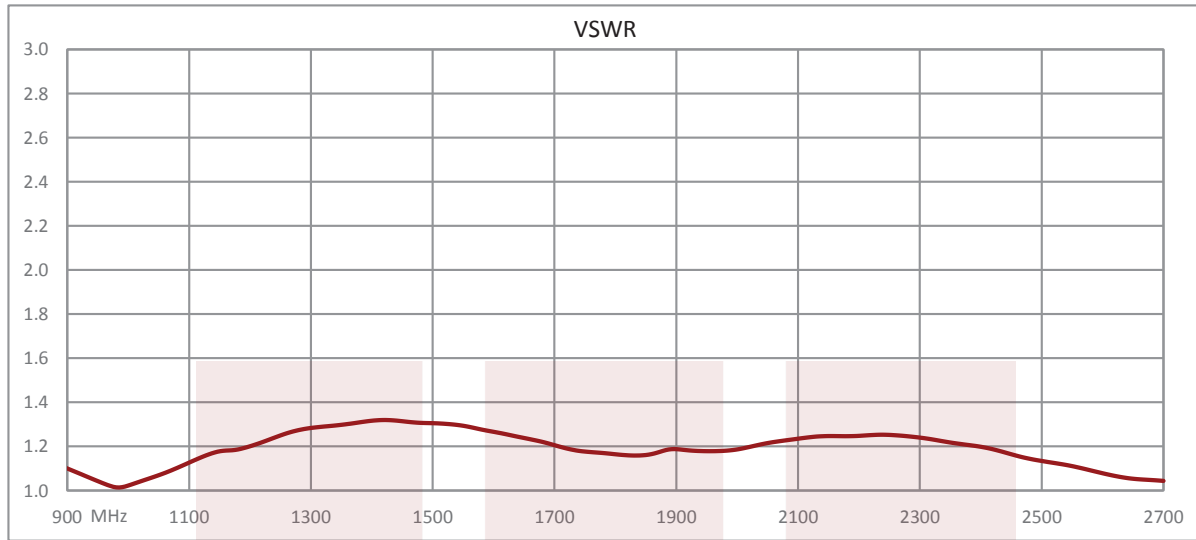
Plotted and Other Data

Notes:



Typical Performance Data



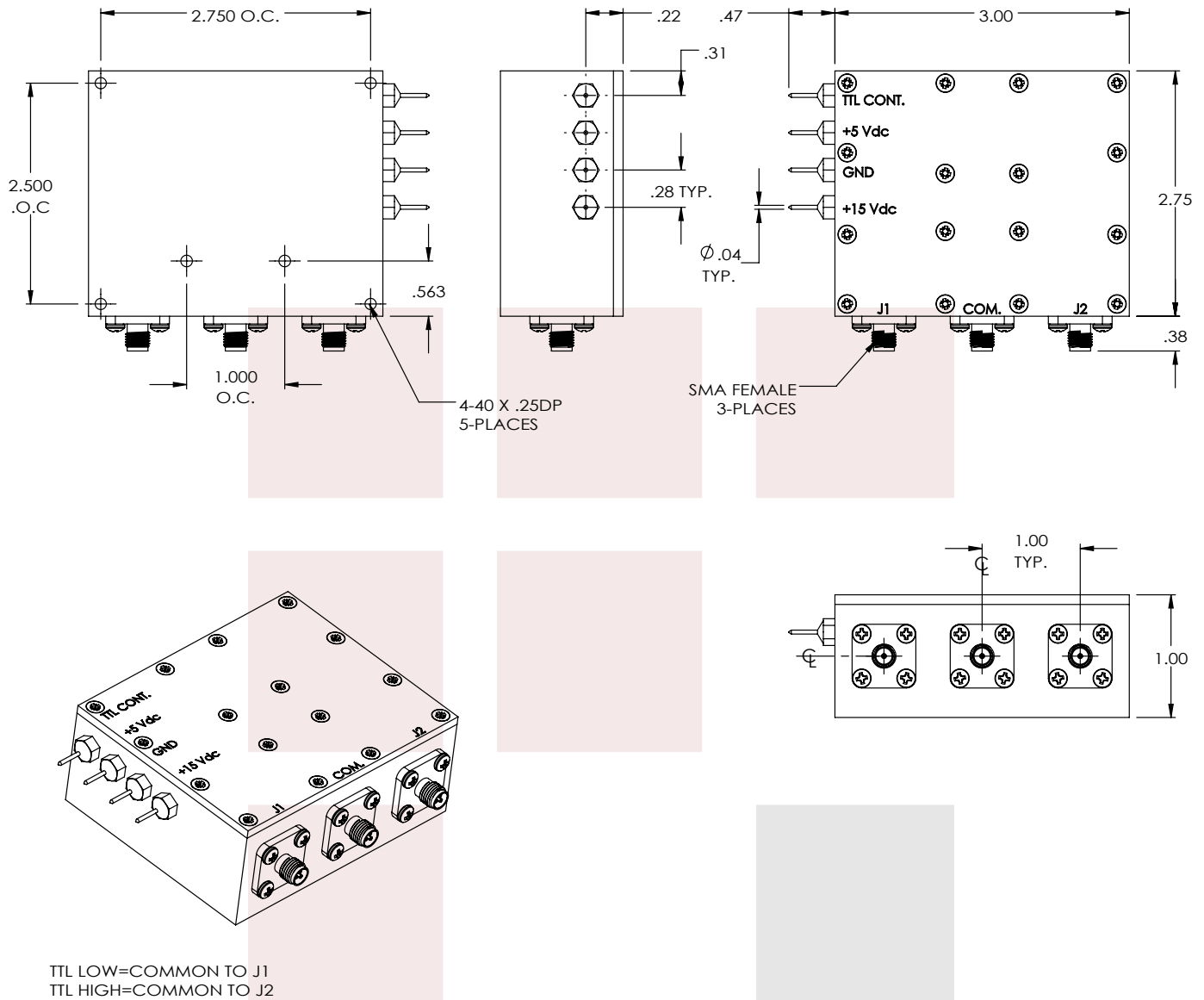


SMA SPDT PIN Diode Switch Absorptive from 800 MHz to 2.7 GHz Rated at 100 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMA SPDT PIN Diode Switch Absorptive from 800 MHz to 2.7 GHz Rated at 100 Watts FMSW2041](https://www.fairviewmicrowave.com/sma-spdt-pin-diode-switch-absorptive-2.7-ghz-100-watts-fmsw2041-p.aspx)

URL: <https://www.fairviewmicrowave.com/sma-spdt-pin-diode-switch-absorptive-2.7-ghz-100-watts-fmsw2041-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.



STANDARD TOLERANCES	
.XX	±0.010
.XXX	±0.005

*STANDARD TOLERANCES APPLY
ONLY TO DIMENSIONS IN INCHES

FAIRVIEW MICROWAVE INC.

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

DWG NO

FMSW2041

CAGE CODE

3FKR5

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CAD FILE 052917

SHEET

SCALE N/A

SIZE A

1408