

Field Replaceable 2.92mm SPDT PIN Diode Switch Absorptive From 500 MHz to 40 GHz Rated at +20 dBm

FMSW6215 is a Single Pole Double Throw (SPDT) Absorptive PIN Diode Switch that operates from 0.5 GHz to 40 GHz. The output port is terminated in 50 ohms when switched in the isolation (off) state. Outstanding performance includes 6 dB max insertion loss, 80 dB typ isolation and 15 ns max switching speed. The design incorporates TTL compatible driver circuitry for accurate logic control. Operational temperature range is -40°C to +85°C and dual voltage controls of +5 DC and -5 DC 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 2.92mm connectors.



Features:

- SPDT Absorptive Switch
- 0.5 GHz to 40.0 GHz
- High Speed Switching
- Insertion Loss 6.0 dB max
- Isolation 60 dB min
- Power Input 20 dBm CW max
- Field Replaceable Connectors

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	0.5		40	GHz
Impedance		50		Ohms
VSWR			2.5:1	
Insertion Loss			6	dB
Isolation	60			dB
Rise Time			15	ns
Fall Time			15	ns
Input Power (CW)			0.1	Watts
Survival Power			1	Watts
Positive Operating Voltage		5		V
Negative Operating Voltage		-5		V
Current @ 5 V		120		mA
Current @ -5 V		100		mA
Operating Temperature	-40		+85	deg C

Applications:

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

Mechanical Specifications

Length	1 in [25.4 mm]
Width	1 in [25.4 mm]
Height	0.5 in [12.7 mm]
Weight	0.06 lbs [27.22 g]
Finish	Gray

Configuration

Design	Absorptive, SPDT
RF Connector	2.92mm 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 COND. B

Shock

MIL-STD-202F, METHOD 213B COND. B

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Vibration
Altitude
Temperature Cycling
ESD Sensitivity

MIL-STD-202F, METHOD 204D COND. B
MIL-STD-202F, METHOD 105C COND. B
MIL-STD-202F, METHOD 107D COND. A
ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in ESD Workstation.



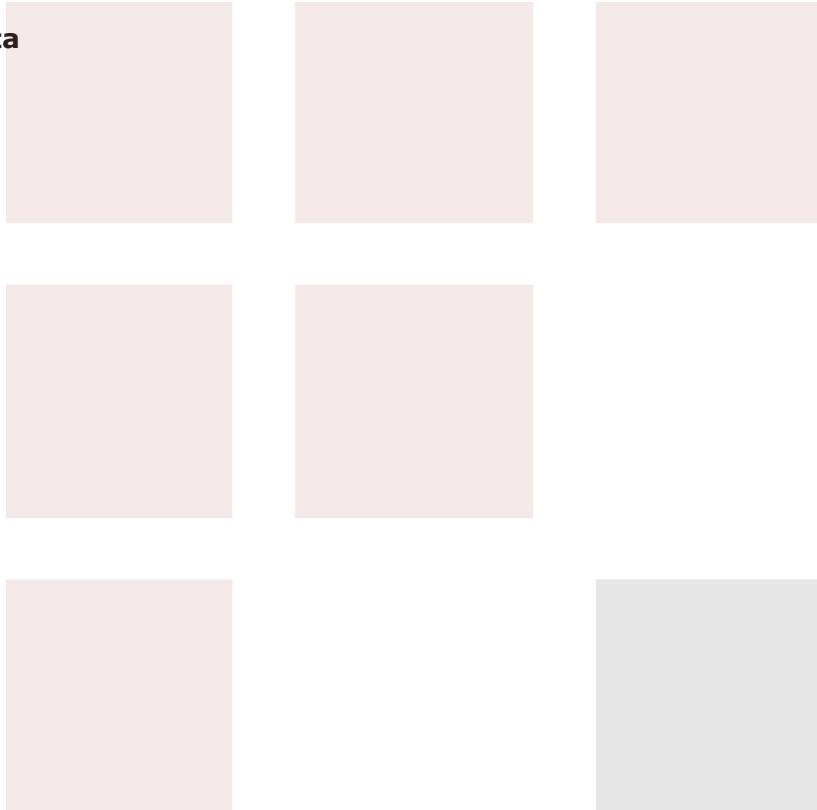
Compliance Certifications (visit www.FairviewMicrowave.com for current document)

REACH Compliant

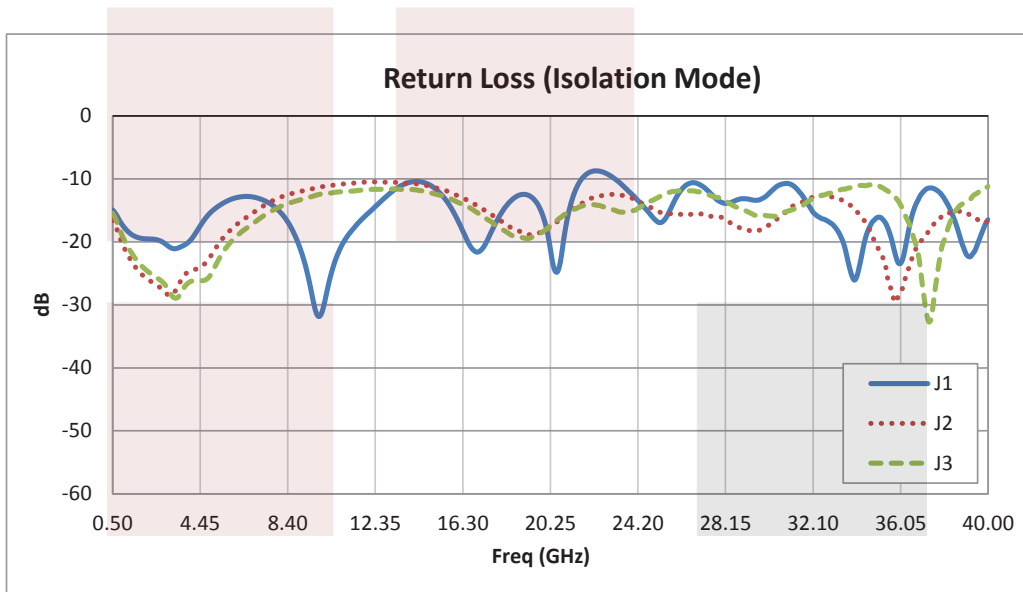
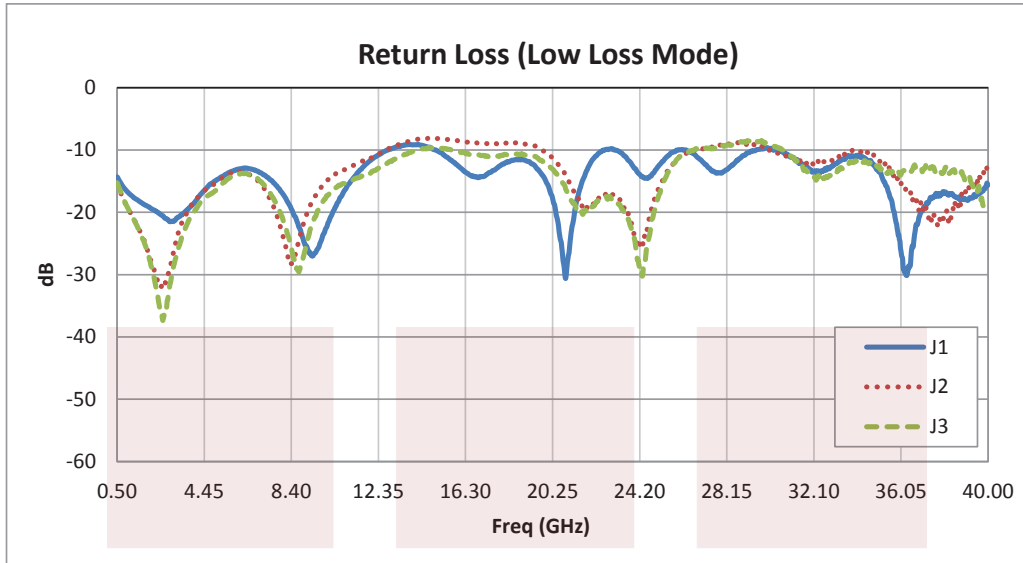
12/17/2015

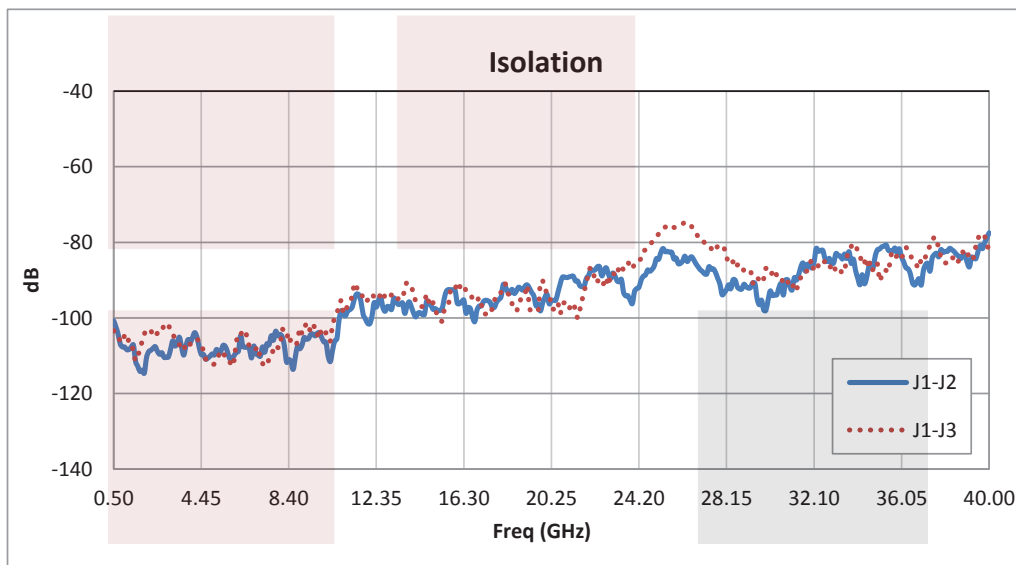
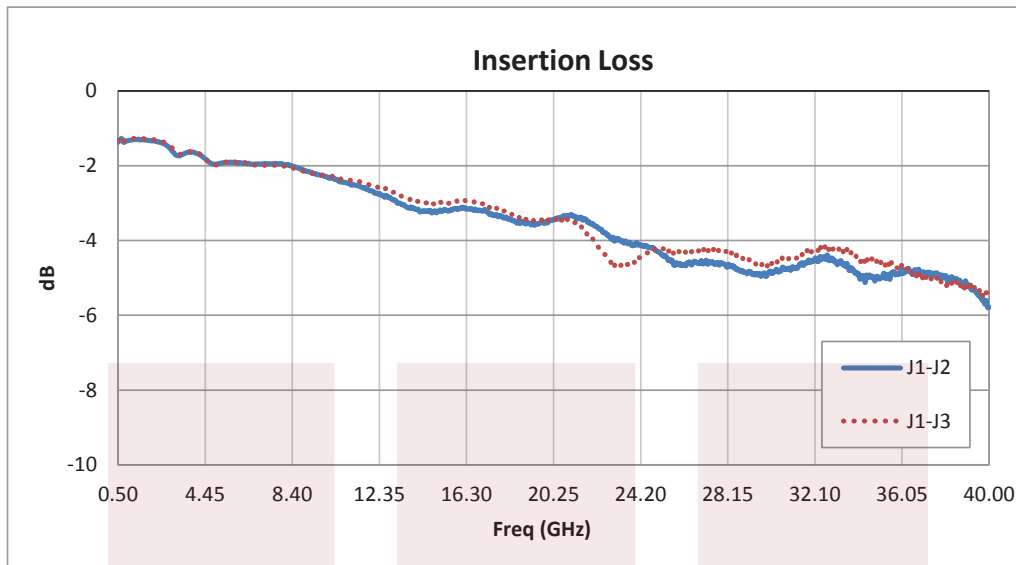
Plotted and Other Data

Notes:



Typical Performance Data



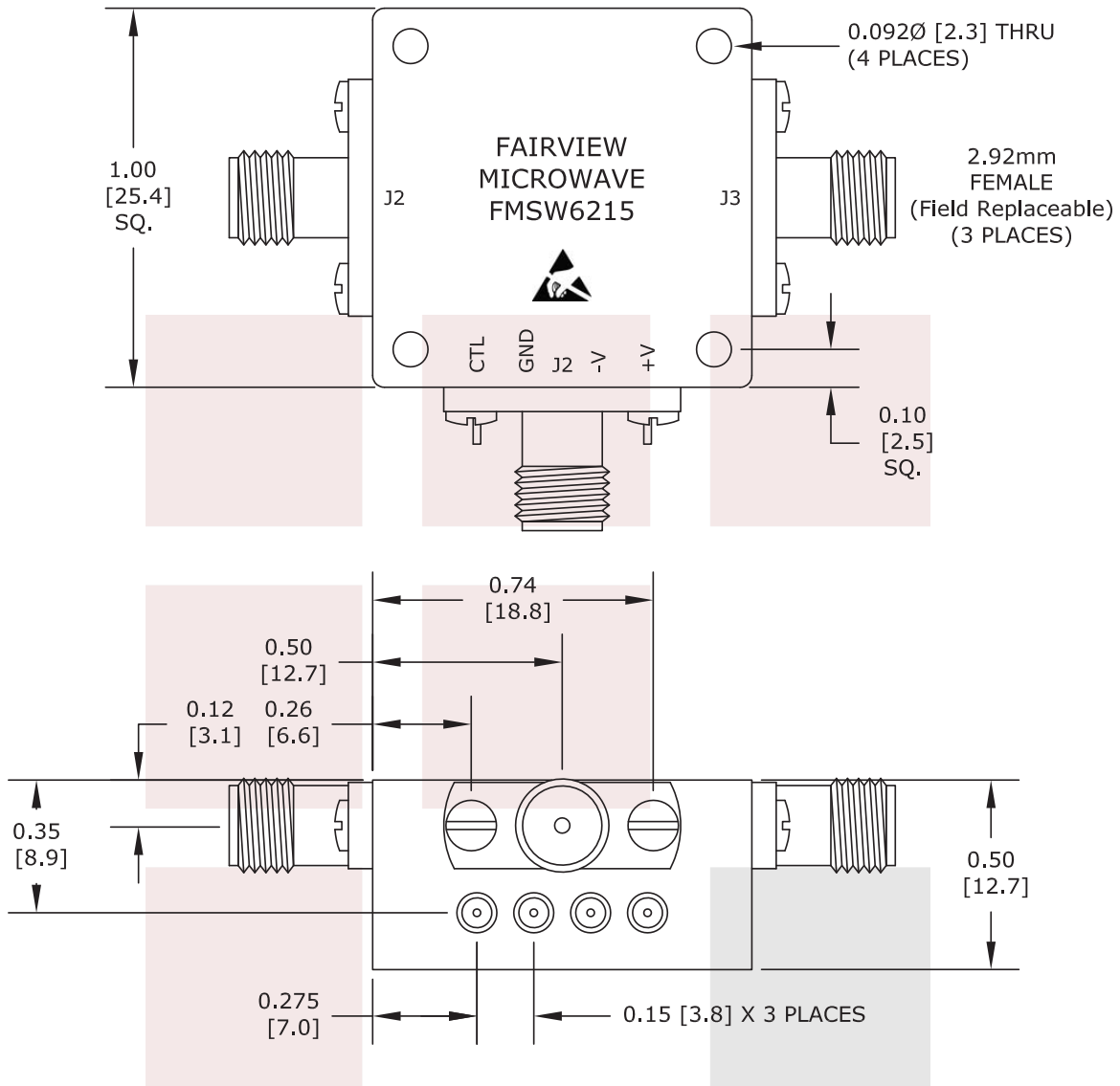


Field Replaceable 2.92mm SPDT PIN Diode Switch Absorptive From 500 MHz to 40 GHz Rated at +20 dBm from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Field Replaceable 2.92mm SPDT PIN Diode Switch Absorptive From 500 MHz to 40 GHz Rated at +20 dBm FMSW6215](http://www.fairviewmicrowave.com/2.92mm-spdt-pin-diode-switch-500-mhz-40-ghz-20-dbm-fmsw6215-p.aspx)

URL: <http://www.fairviewmicrowave.com/2.92mm-spdt-pin-diode-switch-500-mhz-40-ghz-20-dbm-fmsw6215-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 ±0.010
X.XXX ±0.005

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

LOGIC TABLE		
CTL	J1-J2	J1-J3
0	ON	OFF
1	OFF	ON

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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		CAGE CODE		
Field Replaceable 2.92mm SPDT PIN Diode Switch Absorptive From 500 MHz to 40 GHz Rated at +20 dBm	FMSW6215		3FKR5		
	CAD FILE	SHEET	SCALE	SIZE	
	033016		N/A	A	2233