

SP6T Latching DC to 40 GHz Terminated Electro-Mechanical Relay Switch, Self Cut Off, Indicators, Reset, 3W, 12V, 2.92mm

The FMSW6321 is a Single Pole Six Throw (SP6T) 50 Ohm Terminated RF Coaxial Relay Switch that operates from DC to 40 GHz and can handle up to 3 Watts of CW input power at 40 GHz, in a Break Before Make condition. The design features a Latching Actuator with indicators, and is rated for 1M Life Cycles. Insertion Loss is specified from 0.2 dB typ and Isolation from 70 dB min at 6 GHz, with +12 Vdc operating voltage. Performance is guaranteed over -35°C to +85°C. The package interface uses solder terminals and 2.92 mm female connectors.

Electrical Specifications

Switch Type	SP6T, Terminated
Actuator Type	Latching
Switching Sequence	Break Before Make
Actuator Options	Self Cut Off, Indicators, Reset
Polarity	Positive Common

Description	Min	Typ	Max	Units
Frequency Range	DC		40	GHz
Impedance		50		Ohms
Operating Voltage		12		Volts
Actuating Current @ 12 Volts		480		mA
Input Power (CW) (40 GHz)			3	Watts
Switching Time			15	ms

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC - 6	6 - 12	12 - 18	18 - 26.5	26.5 - 40	GHz
VSWR, Max	1.3:1	1.4:1	1.5:1	1.7:1	2:1	
Insertion Loss, Typ	0.2	0.45	0.55	0.7	1	dB
Isolation, Min	70	60	60	55	50	dB

Mechanical Specifications

Size	
Length	2.25 in [57.15 mm]
Width/Diameter	2.25 in [57.15 mm]
Height	2.38 in [60.45 mm]
Weight	0.5825 lbs [264.22 g]
Body Material and Plating	Aluminum, Chem Film
Package Type	Connectorized
Operating Life	1,000,000 Cycles

Connectors

RF Connector Type	2.92mm Female
RF Connector Contact Material & Plating	Copper, Gold
RF Connector Body Material & Plating	Passivated Stainless Steel
Control Connector	Solder Pin



Features:

- SP6T
- DC to 40 GHz
- 2.92mm Female
- +12 Volt
- Break Before Make
- Latching Actuator
- Self Cut Off
- Indicator Circuitry
- Terminated
- Reset

Applications:

- Test & Measurement
- Communications System
- Instrumentation
- Military Communications
- Automatic Communication Test Sets
- Sub-System Testing

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Environmental Specifications

Temperature

Operating Range

ESD Sensitivity

-35 to +85 deg C

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

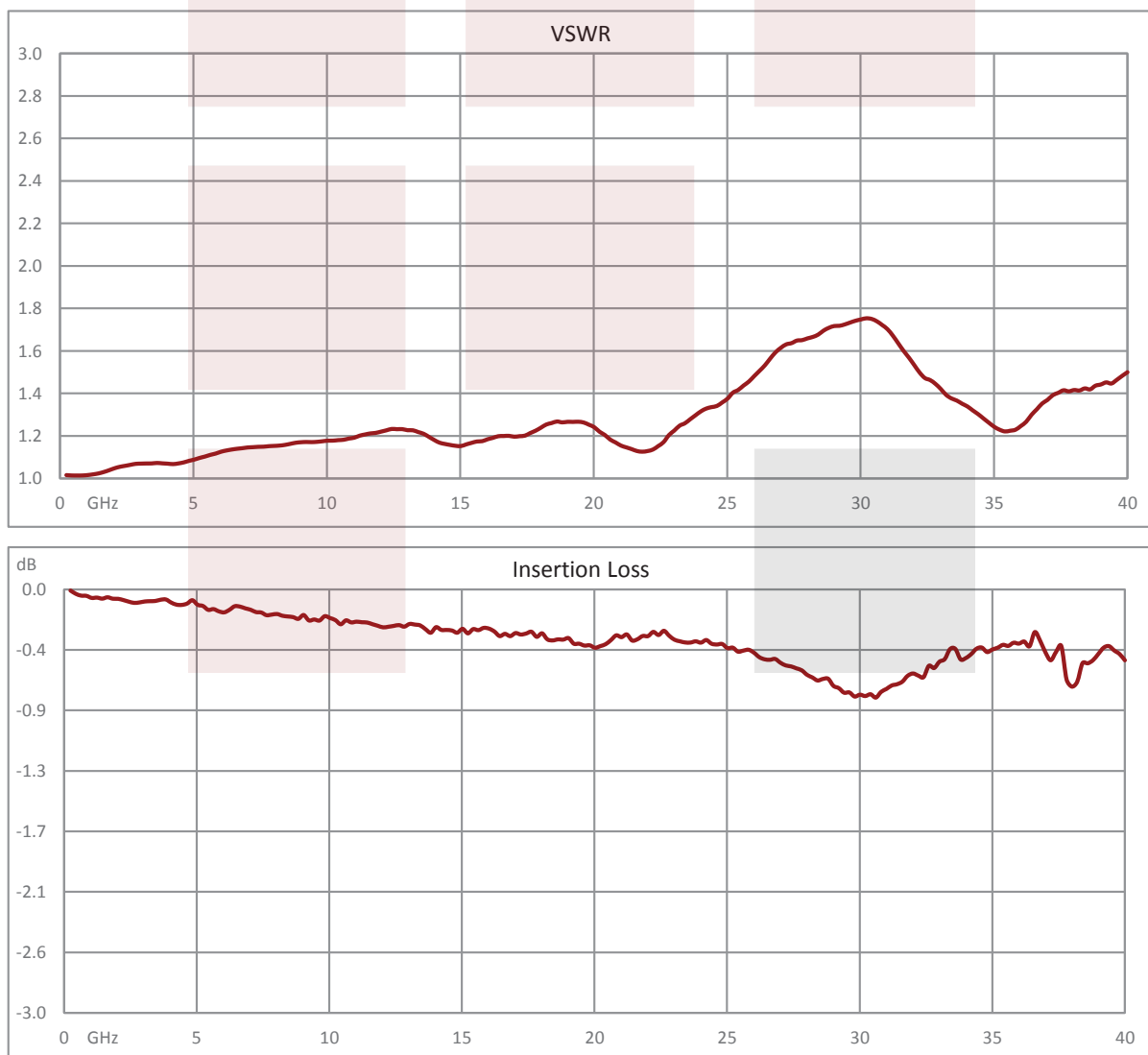


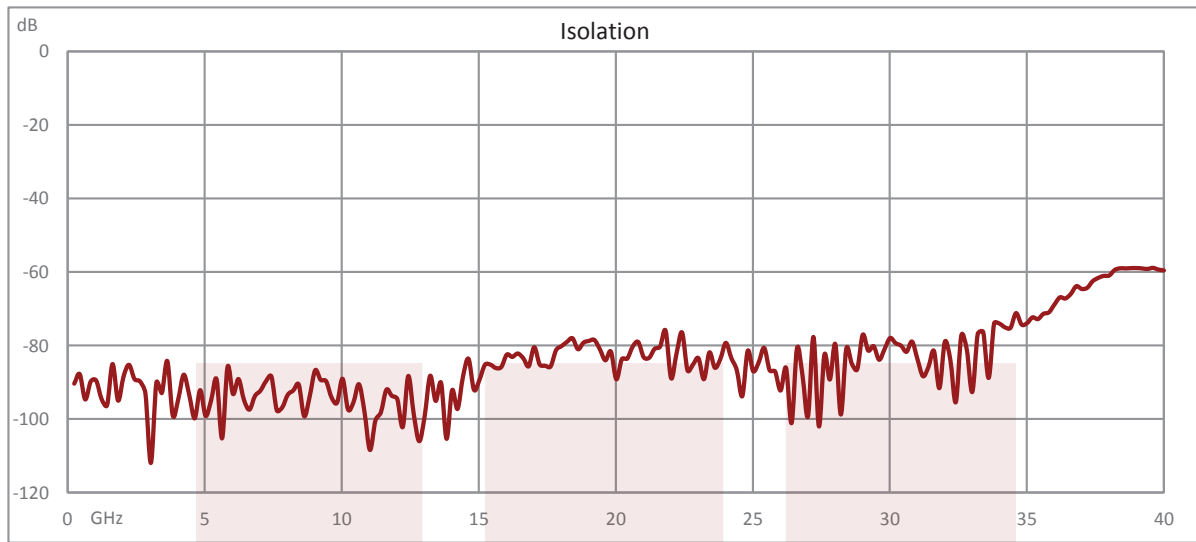
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Typical Performance Data



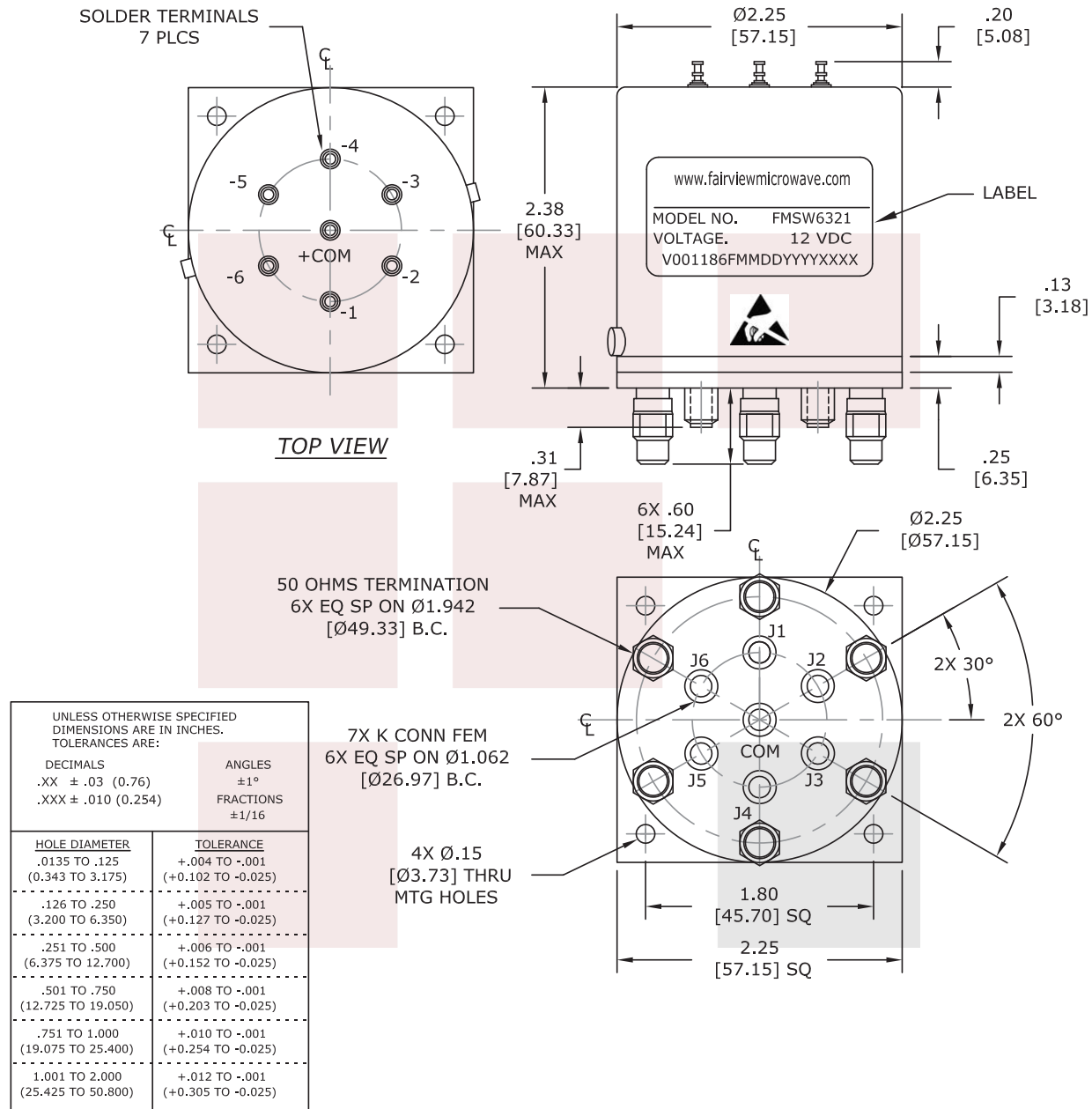


SP6T Latching DC to 40 GHz Terminated Electro-Mechanical Relay Switch, Self Cut Off, Indicators, Reset, 3W, 12V, 2.92mm from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SP6T Latching DC to 40 GHz Terminated Electro-Mechanical Relay Switch, Self Cut Off, Indicators, Reset, 3W, 12V, 2.92mm FMSW6321](https://www.fairviewmicrowave.com/sp6t-latching-dc-to-40-gHz-terminated-electro-mechanical-relay-switch-self-cut-off-indicators-reset-3w-12v-2.92mm-fmsw6321)

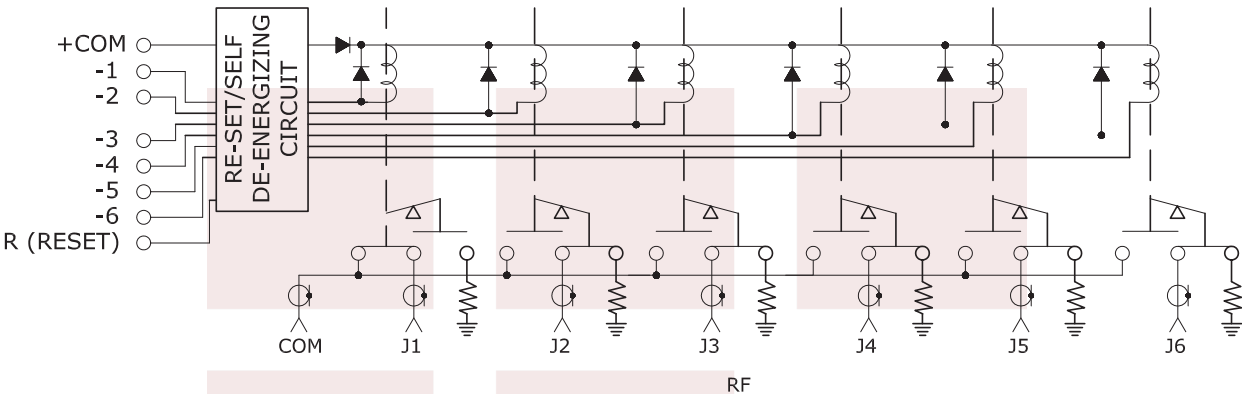
URL: <https://www.fairviewmicrowave.com/sp6t-latching-electromechanical-relay-switch-indicators-terminated-reset-fm-sw6321-p.aspx>

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.



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

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TITLE SP6T Latching DC to 40 GHz Terminated Electro-Mechanical Relay Switch, Self Cut Off, Indicators, Reset, 3W, 12V, 2.92mm				DWG NO FMSW6321		CAGE CODE 3FKR5	
CAD FILE	101916	SHEET		SCALE	N/A	SIZE	A 2233



SCHEMATIC LATCHING SHOWN IN POSITION 1

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