

## SP6T Normally Open Electro-Mechanical Relay Switch From DC to 8 GHz, 50 Watts, TNC

The FMSW6206 is an SP6T Electromechanical Relay Switch that operates over a wide frequency band from DC to 8 GHz and has a rating of 50 Watts input power (CW). Rated for 1M life cycles for high reliability operation, this design uses a Normally Open Actuator with a break before make configuration. The switch exhibits exceptional electrical performance specified from 0.2 dB max for insertion loss and 80 dB min for isolation, and guaranteed over -25°C to +65°C. The assembly requires an operating voltage of +12Vdc. External connectors include solder terminals and TNC female connectors.

### Electrical Specifications

Switch Type	SP6T, Reflective
Actuator Type	Normally Open
Switching Sequence	Break Before Make

Description	Min	Typ	Max	Units
Frequency Range	DC		8	GHz
Impedance		50		Ohms
Operating Voltage		12		Volts
Actuating Current @ 12 Volts		150		mA
VSWR			1.6:1	
Insertion Loss			0.6	dB
Isolation	70			dB
Input Power (CW) (at 8 GHz)			50	Watts

### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC - 4	4 - 8				GHz
VSWR, Max	1.2:1	1.6:1				
Insertion Loss, Max	0.2	0.6				dB
Isolation, Min	80	70				dB

### Mechanical Specifications

<b>Size</b>	
Length	2.5 in [63.5 mm]
Width/Diameter	2 in [50.8 mm]
Height	2 in [50.8 mm]
Weight	0.72 lbs [326.59 g]
Body Material and Plating	Aluminum
Package Type	Connectorized Module
Operating Life	1,000,000 Cycles
Switching Time	50 ms Max



### Features:

- Single Pole Six Throw Relay Switch
- DC to 8 GHz Frequency Range
- 1M Cycle Operating Life Min
- Normally Open Actuator
- Insertion Loss 0.6 dB max
- Isolation 70 dB min
- 50 Watts Avg Power Max
- Switching Sequence Break Before Make

### Applications:

- Test & Measurement
- Communications System
- Instrumentation

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**Connectors**

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

**Environmental Specifications**

**Temperature**

Operating Range	-25 to +65 deg C
ESD Sensitivity	ESD Sensitive Material. Transport material in Approved ESD bags. Handle in approved ESD Workstation.



Environmental Specification Notes:  
 Designed to Meet MIL-DTL-3928

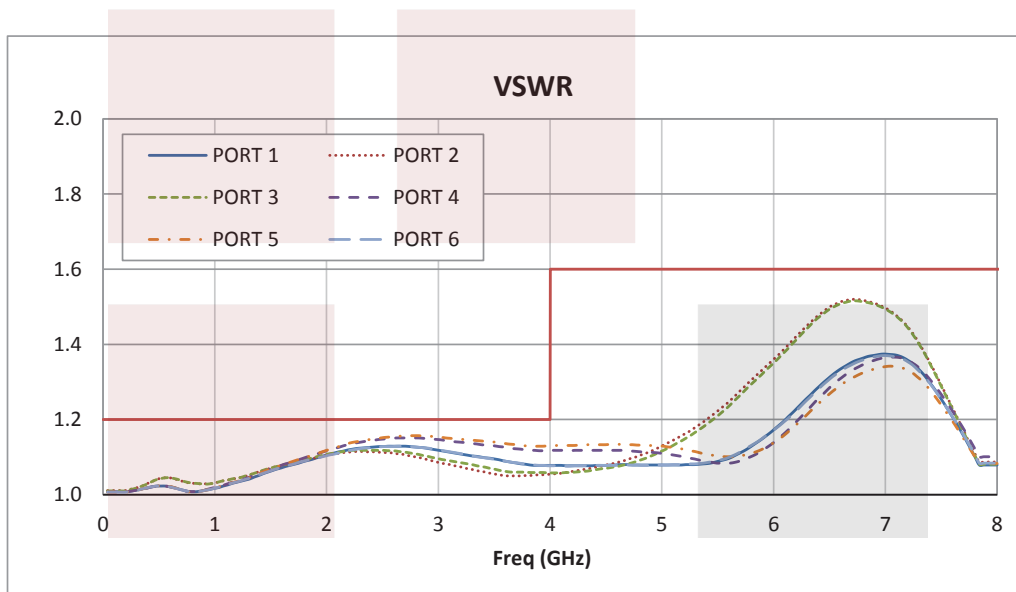
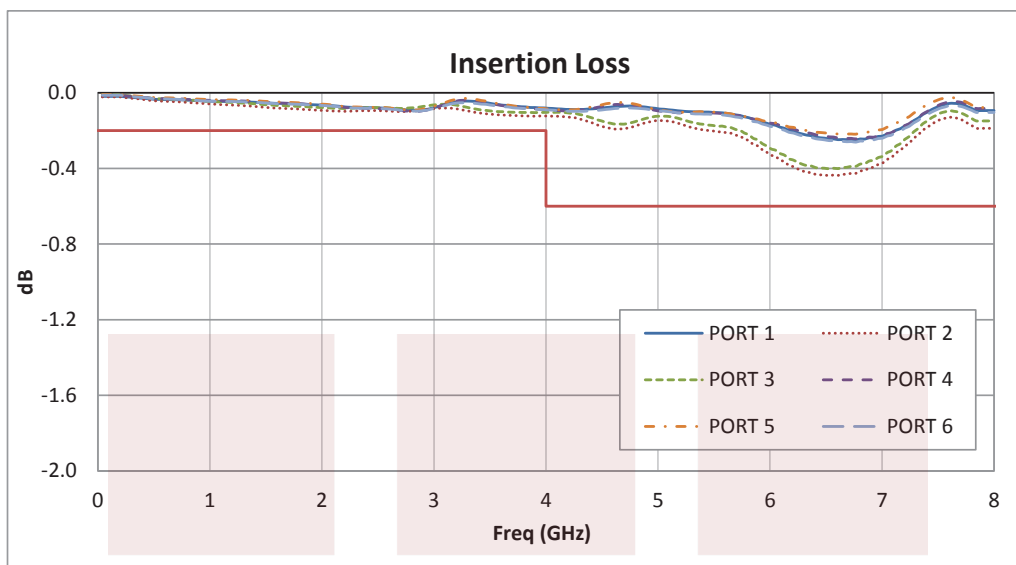
**Compliance Certifications** (visit [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com) for current document)

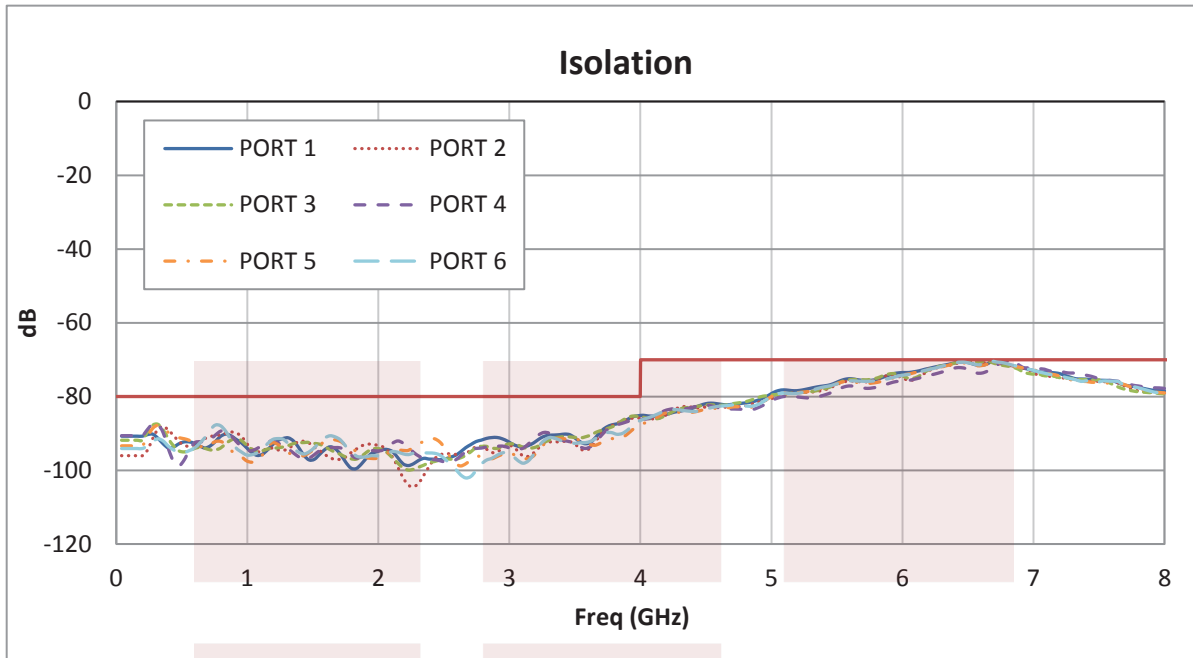
Not RoHS Compliant

**Plotted and Other Data**

Notes:

**Typical Performance Data**



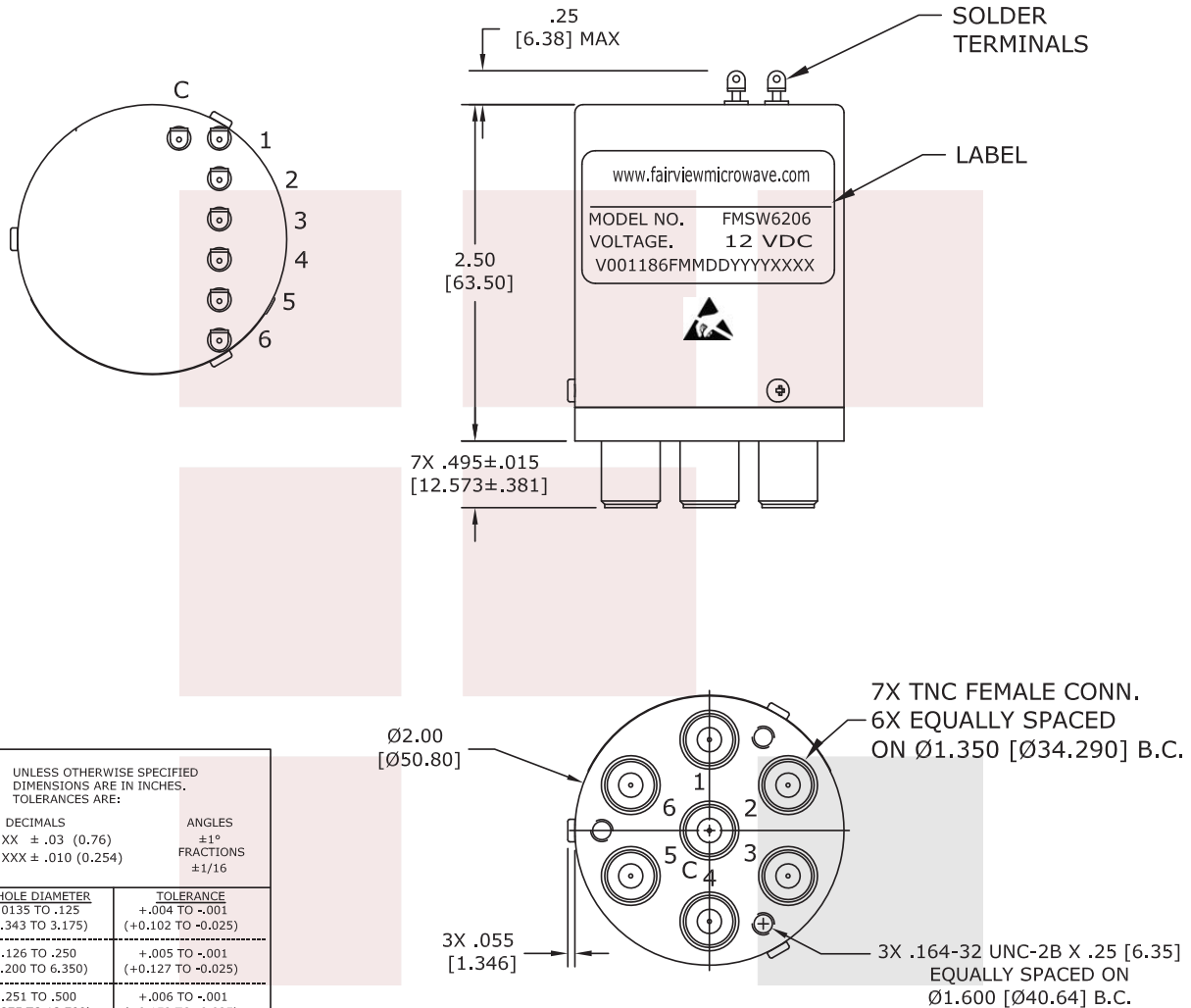


SP6T Normally Open Electro-Mechanical Relay Switch From DC to 8 GHz, 50 Watts, TNC from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SP6T Normally Open Electro-Mechanical Relay Switch From DC to 8 GHz, 50 Watts, TNC FMSW6206](http://www.fairviewmicrowave.com/sp6t-normally-open-electro-mechanical-relay-switch-fmsw6206-p.aspx)

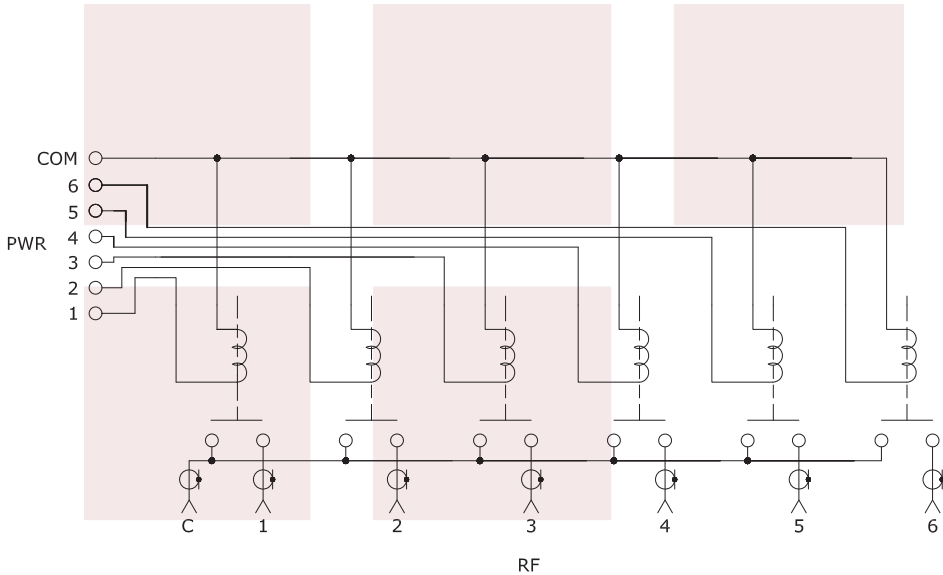
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SUPERSEDE NOTE #1 ON TITLE BLOCK.

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TITLE SP6T Normally Open Electro-Mechanical Relay Switch From DC to 8 GHz, 50 Watts, TNC		DWG NO FMSW6206		CAGE CODE 3FKR5	
CAD FILE	063015	SHEET	SCALE	N/A	SIZE A 2233



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	<div>CAD FILE</div> <div>063015</div>	<div>SHEET</div>	<div>SCALE</div> <div>N/A</div>	<div>SIZE</div> <div>A</div>	<div>2233</div>