

SP6T Normally Open Electro-Mechanical Relay Switch From DC to 10 GHz, 50 Watts with Indicators, TTL, Diodes, N

The FMSW6189 is an SP6T Electromechanical Relay Switch that operates over a wide frequency band from DC to 10 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, TTL logic driver, position indicators and suppression diodes. The switch exhibits exceptional electrical performance specified from 0.25 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 +28Vdc. External connectors include solder terminals and N female connectors.

Electrical Specifications

Switch Type	SP6T, Reflective
Actuator Type	Normally Open
Switching Sequence	Break Before Make
Actuator Options	Indicators, TTL Logic, Diodes
TTL Control	on: 2.4 to 5 Volts off: 0 to 0.8 Volts

Description	Min	Typ	Max	Units
Frequency Range	DC		10	GHz
Impedance		50		Ohms
Operating Voltage		28		Volts
Actuating Current @ 28 Volts		150		mA
VSWR			1.6:1	
Insertion Loss			0.6	dB
Isolation	60			dB
Input Power (CW) (at 10 GHz)			50	Watts

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC - 4	4 - 8	8 - 10			GHz
VSWR, Max	1.25:1	1.4:1	1.6:1			
Insertion Loss, Max	0.25	0.4	0.6			dB
Isolation, Min	80	70	60			dB

Mechanical Specifications

Size	
Length	3.21 in [81.53 mm]
Width/Diameter	2.47 in [62.74 mm]
Height	2.47 in [62.74 mm]
Weight	1.156 lbs [524.35 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 10 GHz Frequency Range
- 1M Cycle Operating Life Min
- Normally Open Actuator
- TTL Logic Driver, Position Indicators, Suppression Diodes
- Insertion Loss 0.6 dB max
- Isolation 60 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	N 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

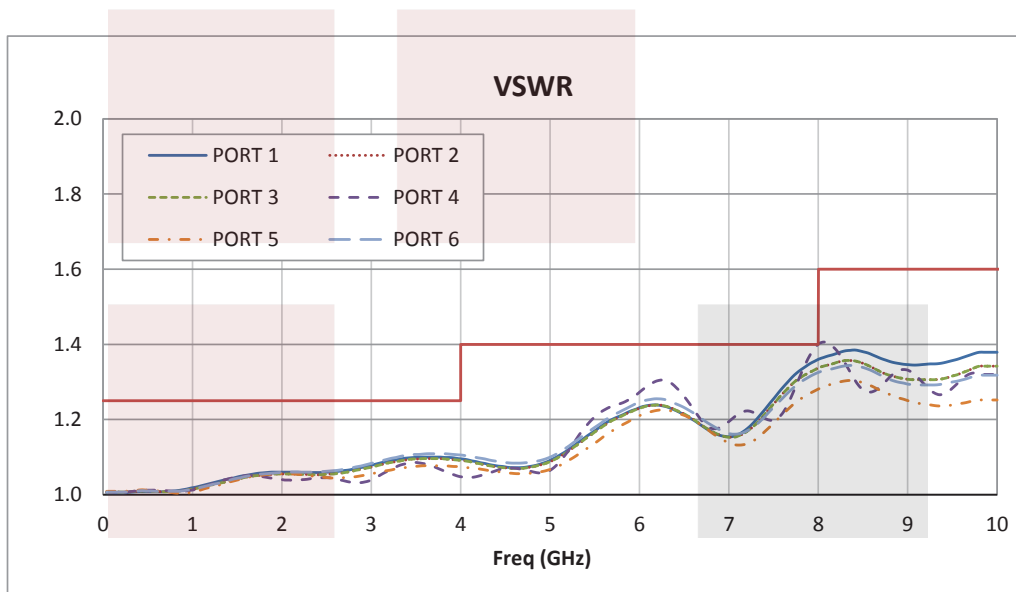
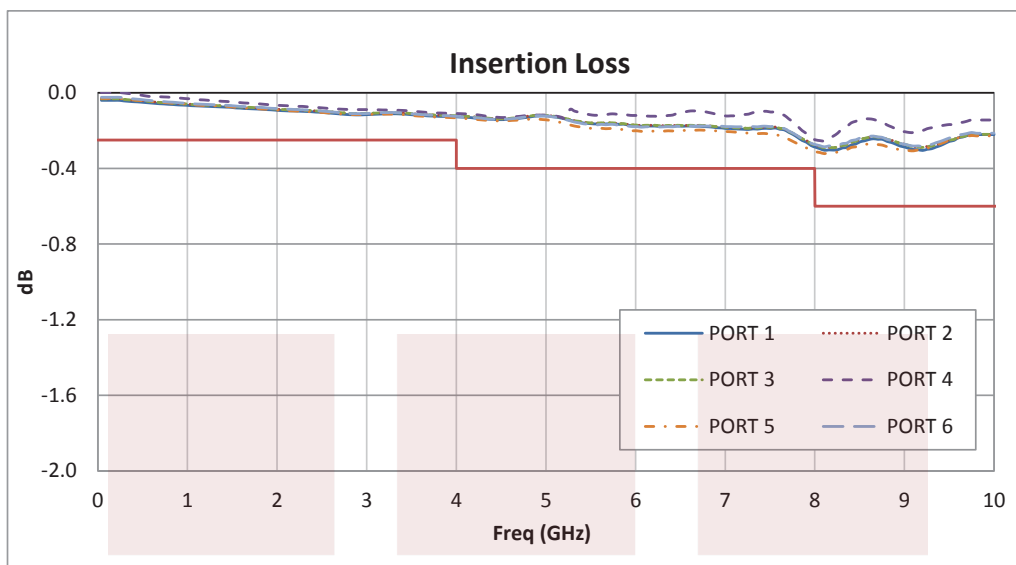
Compliance Certifications (visit www.FairviewMicrowave.com for current document)

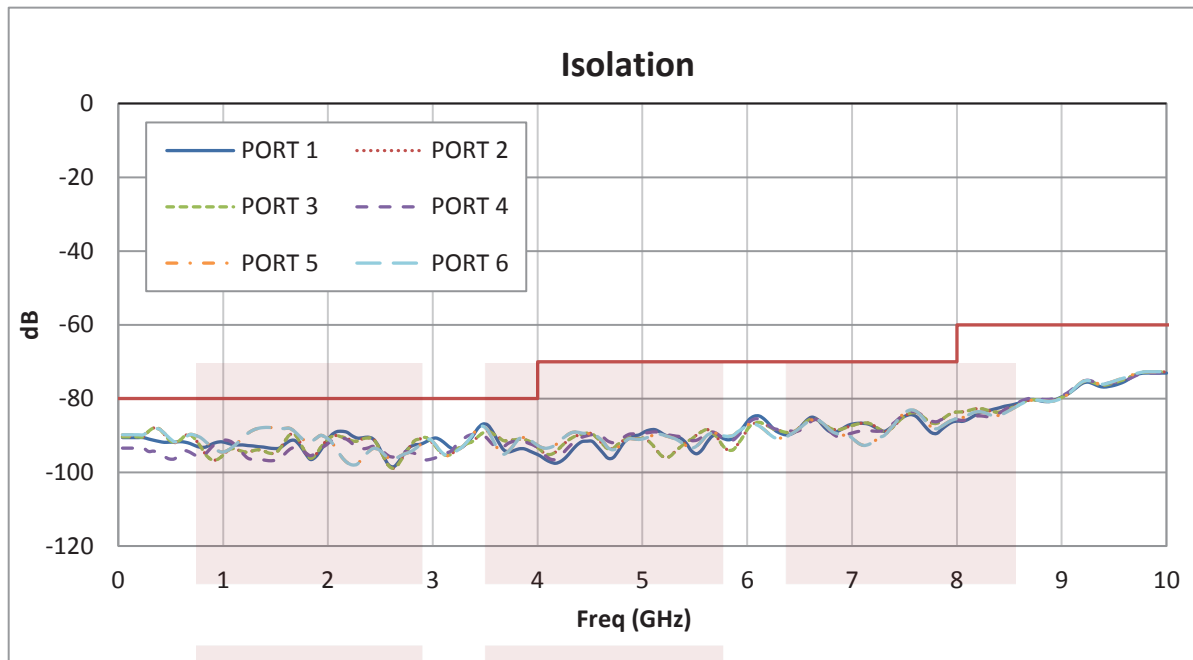
Not RoHS Compliant

Plotted and Other Data

Notes:

Typical Performance Data



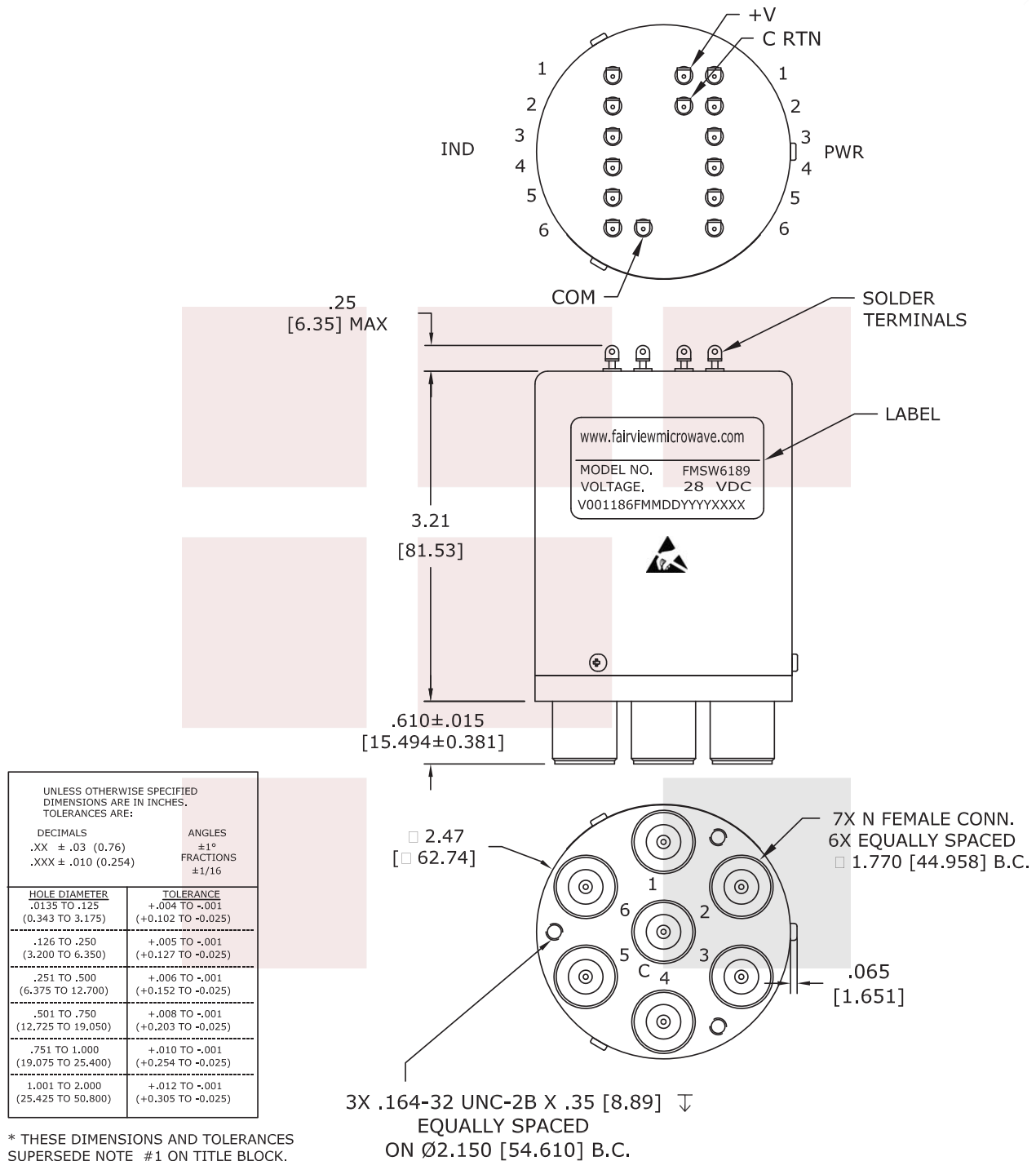


SP6T Normally Open Electro-Mechanical Relay Switch From DC to 10 GHz, 50 Watts with Indicators, TTL, Diodes, N from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

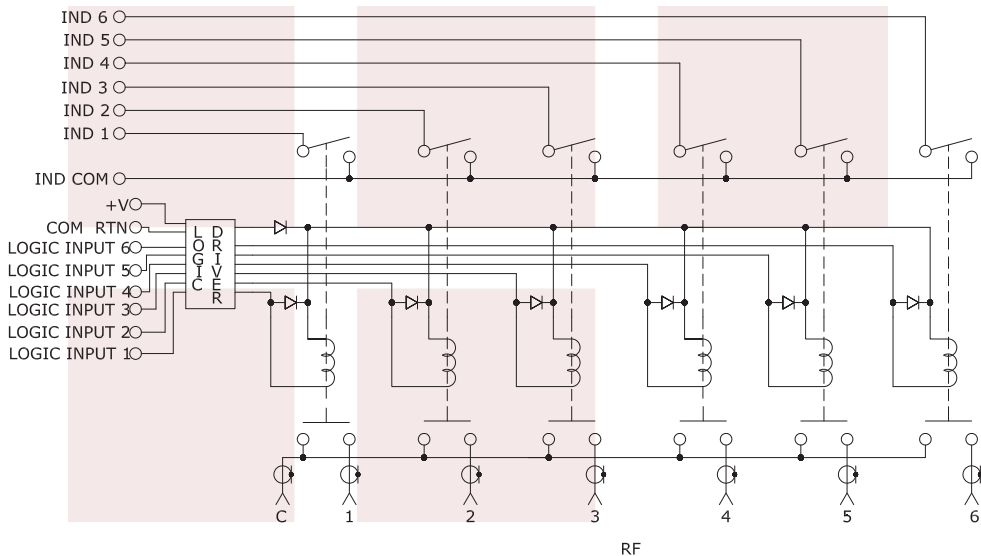
For additional information on this product, please click the following link: [SP6T Normally Open Electro-Mechanical Relay Switch From DC to 10 GHz, 50 Watts with Indicators, TTL, Diodes, N FMSW6189](http://www.fairviewmicrowave.com/sp6t-normally-open-electro-mechanical-relay-switch-indicators-ttl-fmsw6189-p.aspx)

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TITLE SP6T Normally Open Electro-Mechanical Relay Switch From DC to 10 GHz, 50 Watts with Indicators, TTL, Diodes, N	DWG NO FMSW6189		CAGE CODE 3FKR5		
	CAD FILE 062215	SHEET	SCALE N/A	SIZE A	2233



SCHEMATIC NORMALLY OPEN SHOWN IN DE-ENERGIZED POSITION

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