

SP4T Normally Open Electro-Mechanical Relay Switch From DC to 10 GHz, 160 Watts with Indicators, TTL, Diodes, N

The FMSW6192 is an SP4T Electromechanical Relay Switch that operates over a wide frequency band from DC to 10 GHz and has a rating of 160 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 +12Vdc. External connectors include solder terminals and N female connectors.

Electrical Specifications

Switch Type	SP4T, 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		12		Volts
Actuating Current @ 12 Volts		255		mA
VSWR			1.6:1	
Insertion Loss			0.6	dB
Isolation	60			dB
Input Power (CW) (at 10 GHz)			160	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 Four 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
- 160 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

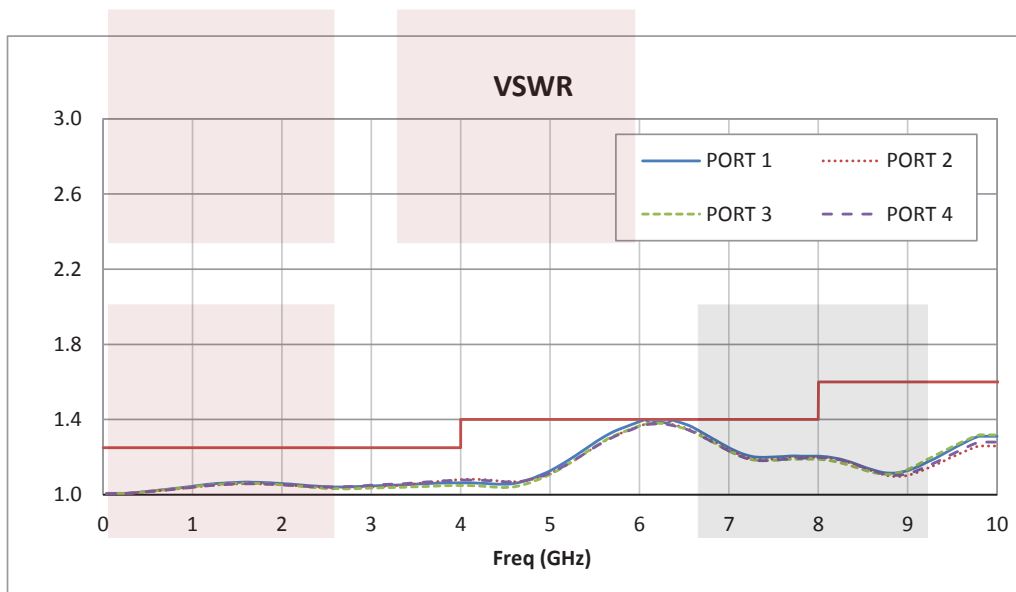
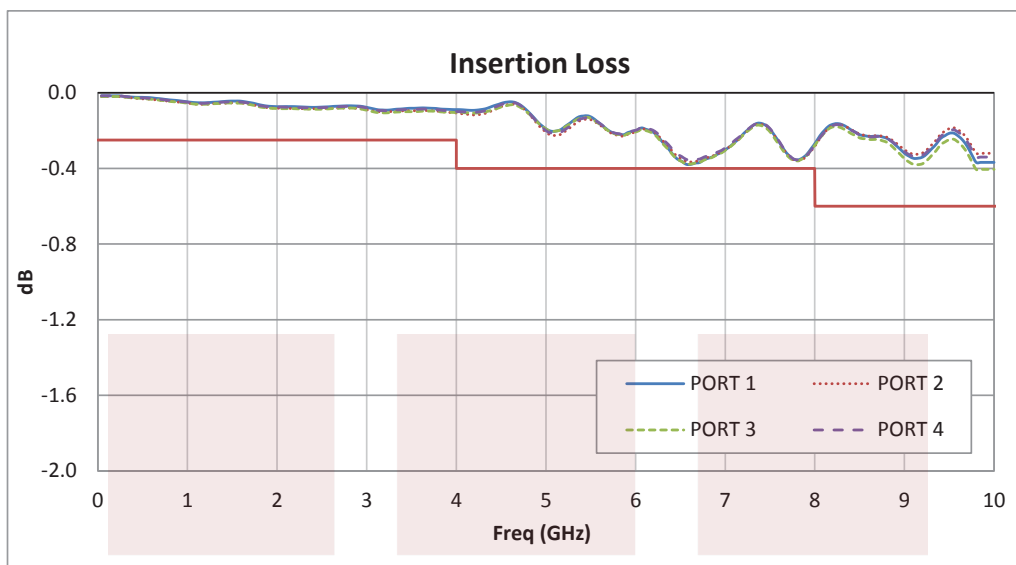
Compliance Certifications (visit www.FairviewMicrowave.com for current document)

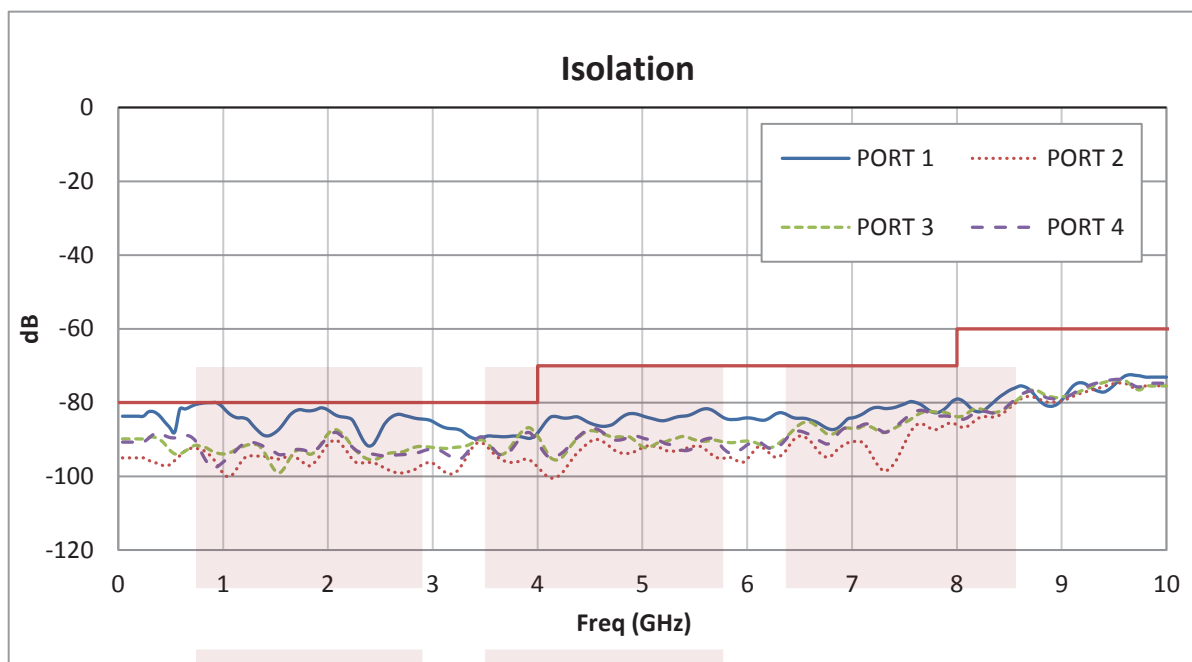
Not RoHS Compliant

Plotted and Other Data

Notes:

Typical Performance Data



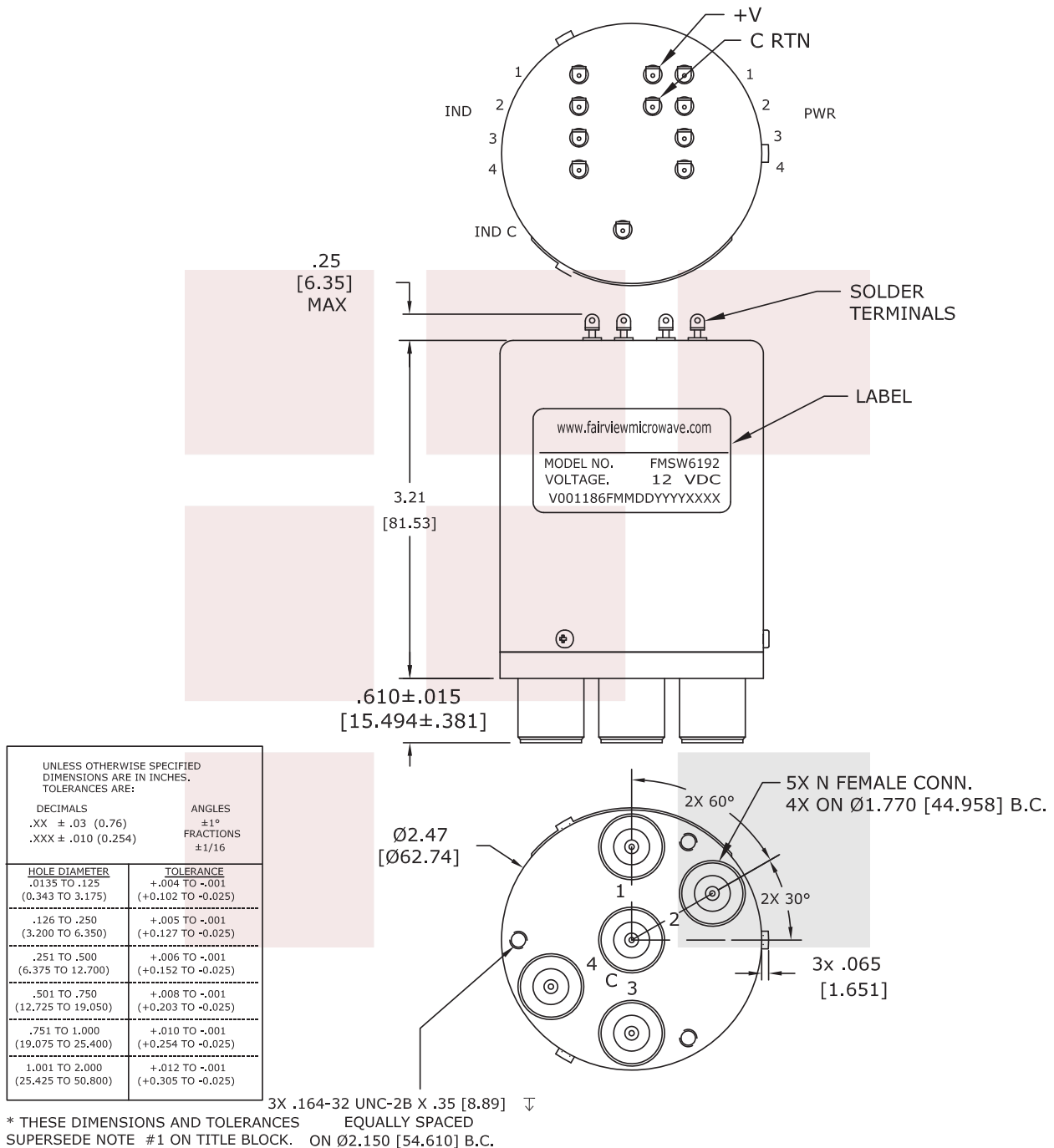


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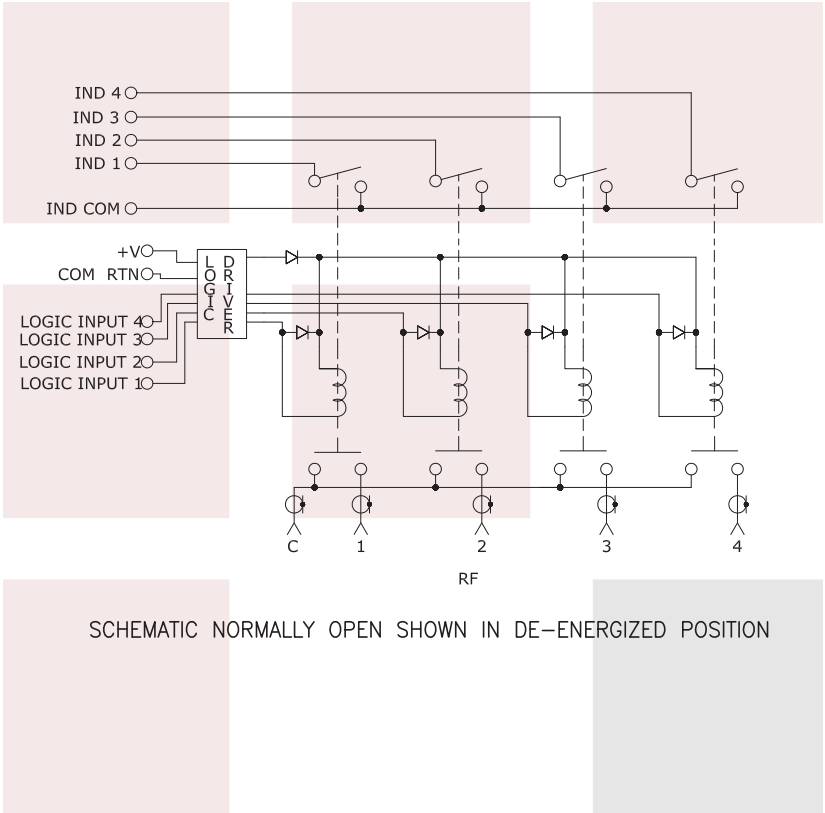
For additional information on this product, please click the following link: [SP4T Normally Open Electro-Mechanical Relay Switch From DC to 10 GHz, 160 Watts with Indicators, TTL, Diodes, N FMSW6192](http://www.fairviewmicrowave.com/sp4t-normally-open-electro-mechanical-relay-switch-indicators-ttl-fmsw6192-p.aspx)

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	CAD FILE 042815	SHEET	SCALE N/A	SIZE A	2233



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