

SPDT Failsafe Electro-Mechanical Relay Switch From DC to 26.5 GHz, 20 Watts with TTL, Diodes, Indicators, SMA

The FMSW6096 is an SPDT Electromechanical Relay Switch that operates over a wide frequency band from DC to 26.5 GHz and has a rating of 20 Watts input power (CW). Rated for 1M life cycles for high reliability operation, this design uses a Failsafe Actuator with a break before make configuration, TTL logic driver, position indicators and suppression diodes. The switch exhibits exceptional electrical performance specified from 0.2 dB max for insertion loss and 80 dB min for isolation, and guaranteed over -55°C to +85°C. The assembly requires an operating voltage of +12Vdc and is certified as RoHS compliant. External connectors include solder terminals and SMA female connectors.

Electrical Specifications

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

Description	Min	Typ	Max	Units
Frequency Range	DC		26.5	GHz
Impedance		50		Ohms
Operating Voltage		12		Volts
Actuating Current @ 12 Volts		300		mA
VSWR			1.5:1	
Insertion Loss			0.5	dB
Isolation	50			dB
Input Power (CW) (at 26.5 GHz)			20	Watts

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC - 4	4 - 8	8 - 12	12 - 18	18 - 26.5	GHz
VSWR, Max	1.25:1	1.25:1	1.3:1	1.35:1	1.5:1	
Insertion Loss, Max	0.2	0.25	0.3	0.4	0.5	dB
Isolation, Min	80	75	70	60	50	dB

Mechanical Specifications

Size	
Length	1.83 in [46.48 mm]
Width/Diameter	1.27 in [32.26 mm]
Height	0.5 in [12.7 mm]
Weight	0.136 lbs [61.69 g]
Body Material and Plating	Aluminum
Package Type	Connectorized Module
Operating Life	1,000,000 Cycles
Switching Time	35 ms Max



Features:

- Single Pole Double Throw Relay Switch
- DC to 26.5 GHz Frequency Range
- 1M Cycle Operating Life Min
- Failsafe Actuator
- TTL Logic Driver, Position Indicators, Suppression Diodes
- Insertion Loss 0.5 dB max
- Isolation 50 dB min
- 20 Watts Avg Power Max
- Switching Sequence Break Before Make

Applications:

- Test & Measurement
- Communications System
- Instrumentation

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Connectors

RF Connector Type	SMA 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	-55 to +85 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

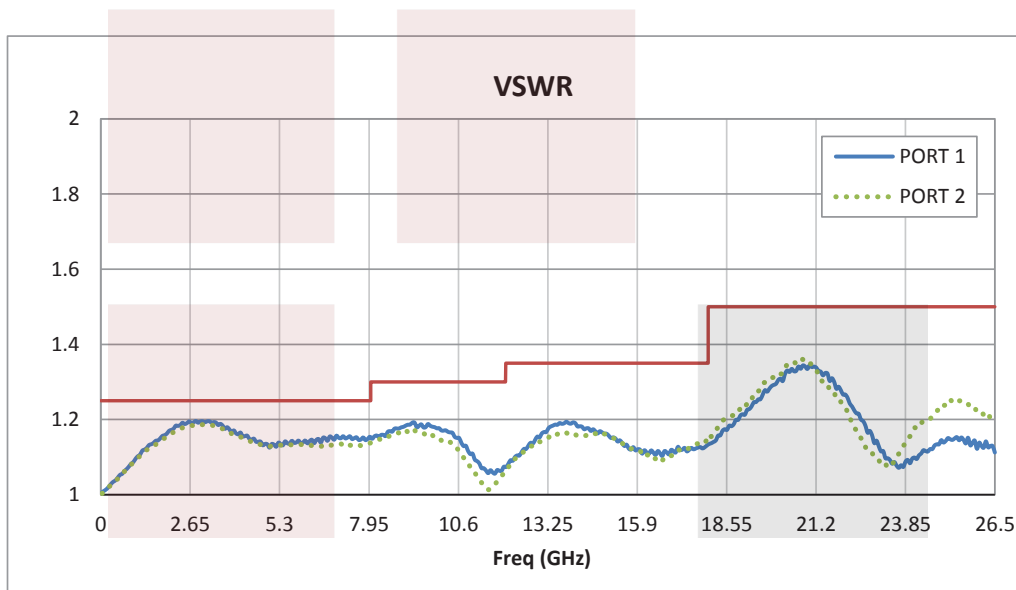
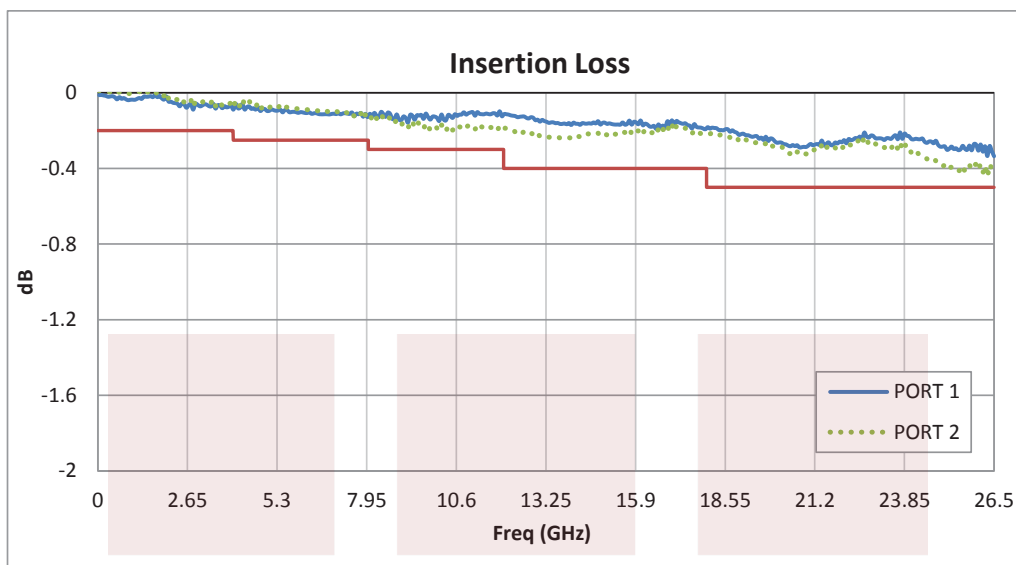
Compliance Certifications (visit www.FairviewMicrowave.com for current document)

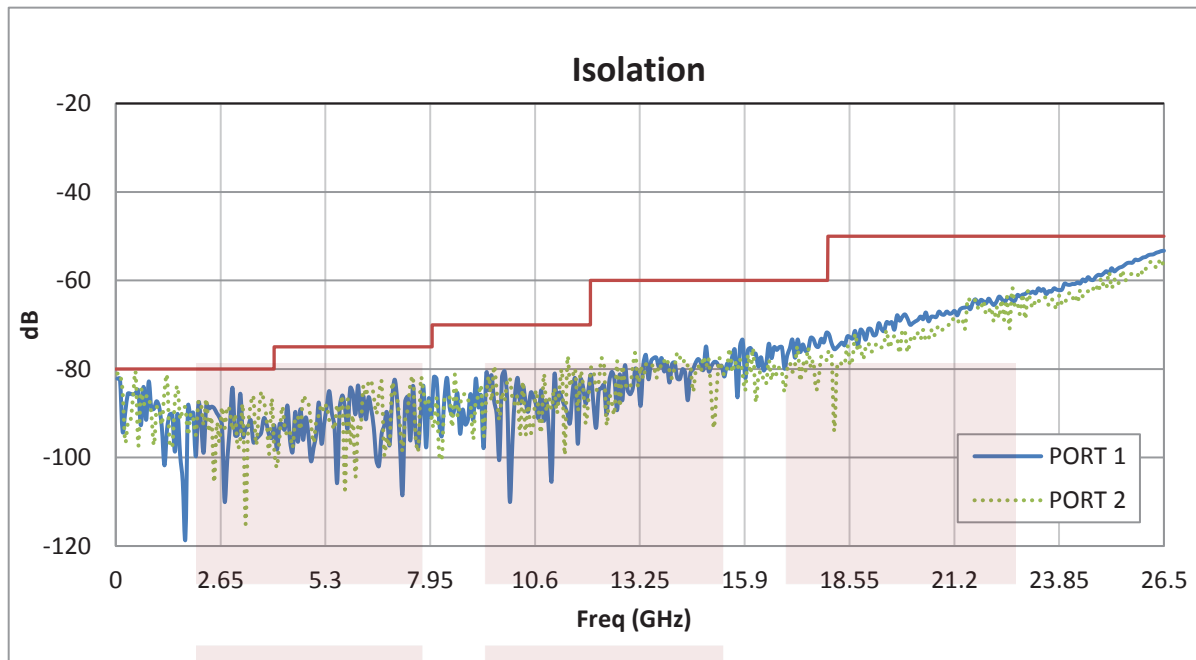
RoHS Compliant

Plotted and Other Data

Notes:

Typical Performance Data



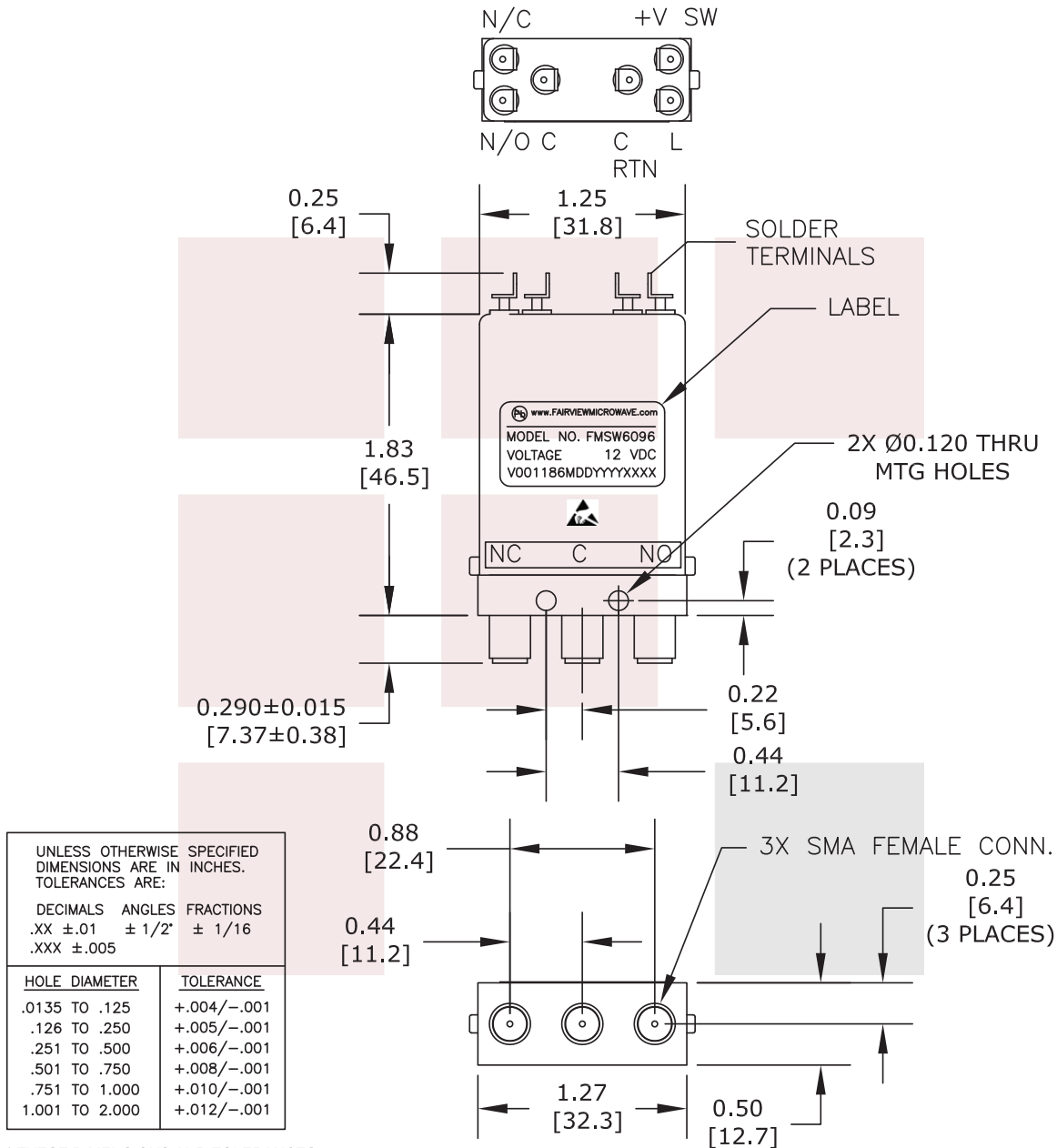


SPDT Failsafe Electro-Mechanical Relay Switch From DC to 26.5 GHz, 20 Watts with TTL, Diodes, Indicators, SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

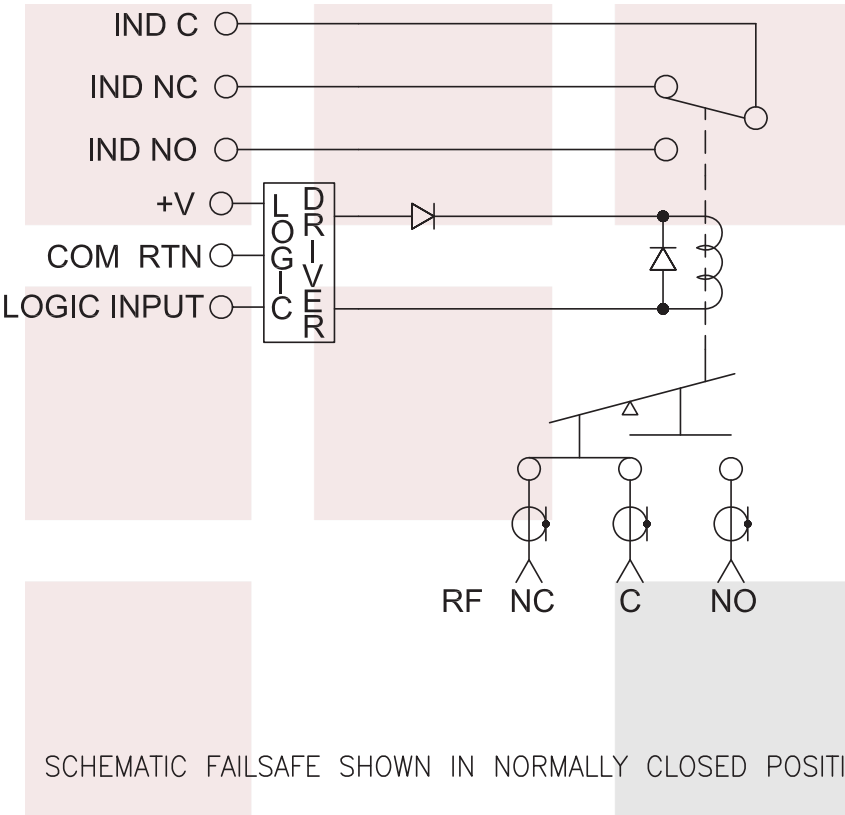
For additional information on this product, please click the following link: [SPDT Failsafe Electro-Mechanical Relay Switch From DC to 26.5 GHz, 20 Watts with TTL, Diodes, Indicators, SMA FMSW6096](http://www.fairviewmicrowave.com/spdt-failsafe-electro-mechanical-relay-switch-ttl-fmsw6096-p.aspx)

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	CAD FILE 020116	SHEET	SCALE N/A	SIZE A	3045



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