

SPDT Latching Electro-Mechanical Relay Switch From DC to 26.5 GHz, 20 Watts with Indicators, TTL, Self Cut Off, Diodes, SMA

The FMSW6100 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 Latching Actuator with a break before make configuration, self cut off circuitry, 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 -25°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	Latching
Switching Sequence	Break Before Make
Actuator Options	Indicators, TTL Logic, Self Cut Off, Diodes
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		200		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



Features:

- Single Pole Double Throw Relay Switch
- DC to 26.5 GHz Frequency Range
- 1M Cycle Operating Life Min
- Latching Actuator
- Self Cut Off, 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

Fairview Microwave
1130 Junction Dr. #100
Allen, TX 75013
Tel: 1-800-715-4396 / (972) 649-6678
Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

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	0.148 lbs [67.13 g]
Body Material and Plating	Aluminum
Package Type	Connectorized Module
Operating Life	1,000,000 Cycles
Switching Time	20 ms Max

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	-25 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

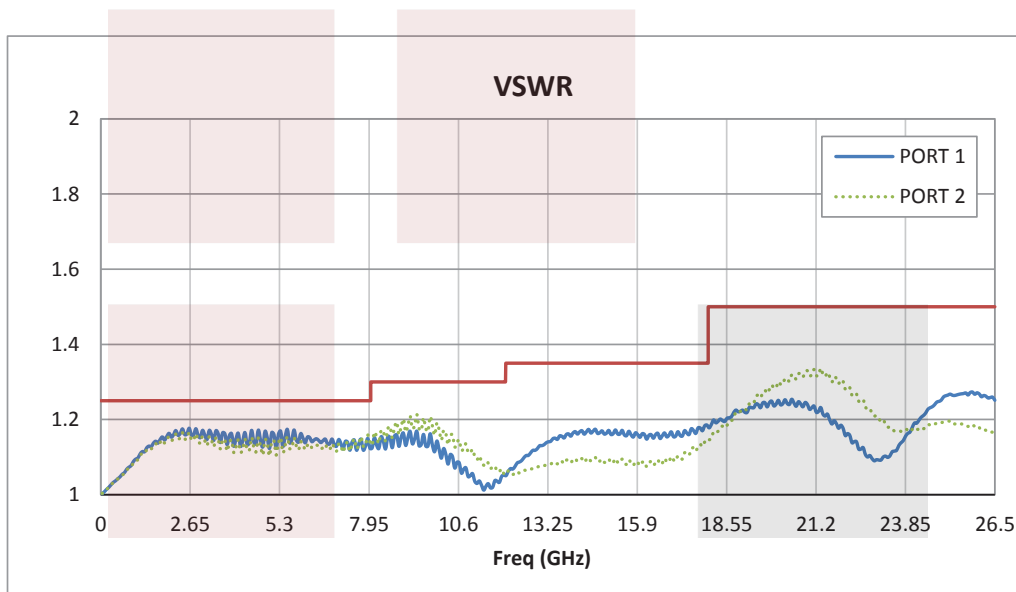
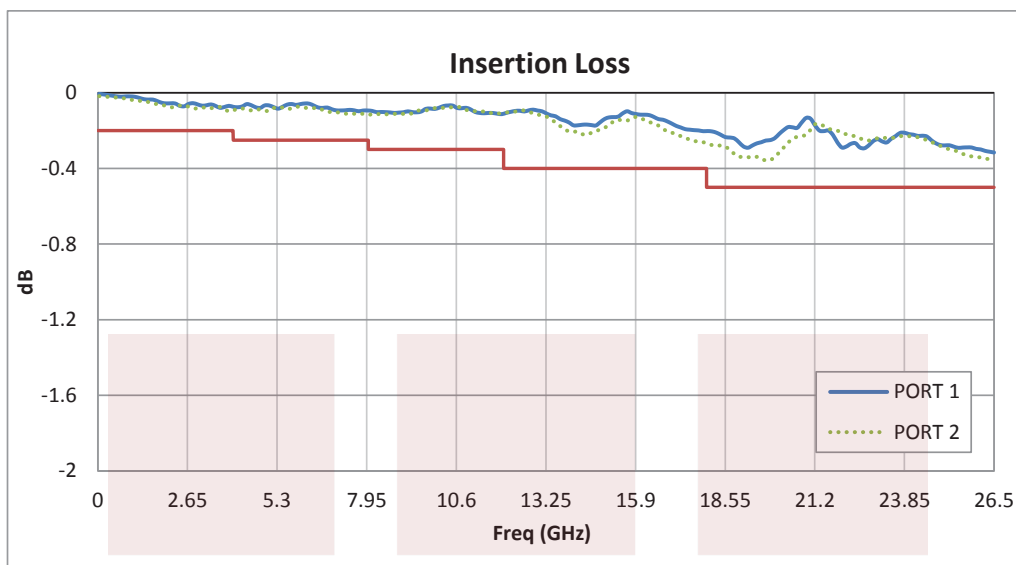
Compliance Certifications (visit www.FairviewMicrowave.com for current document)

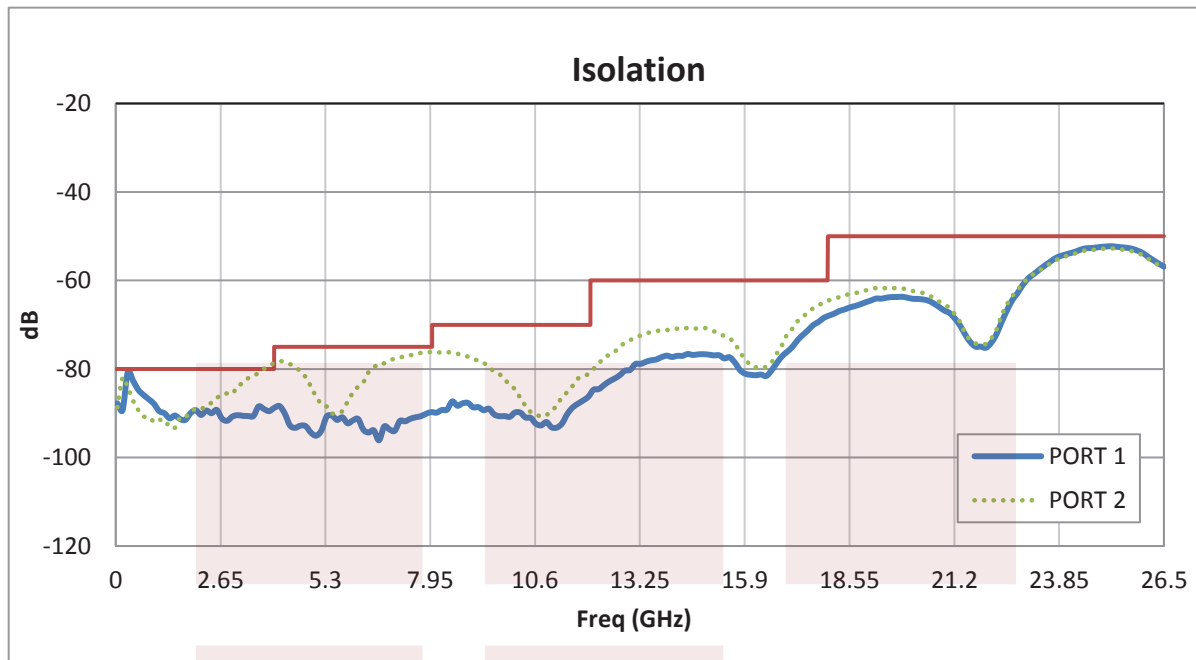
RoHS Compliant

Plotted and Other Data

Notes:

Typical Performance Data



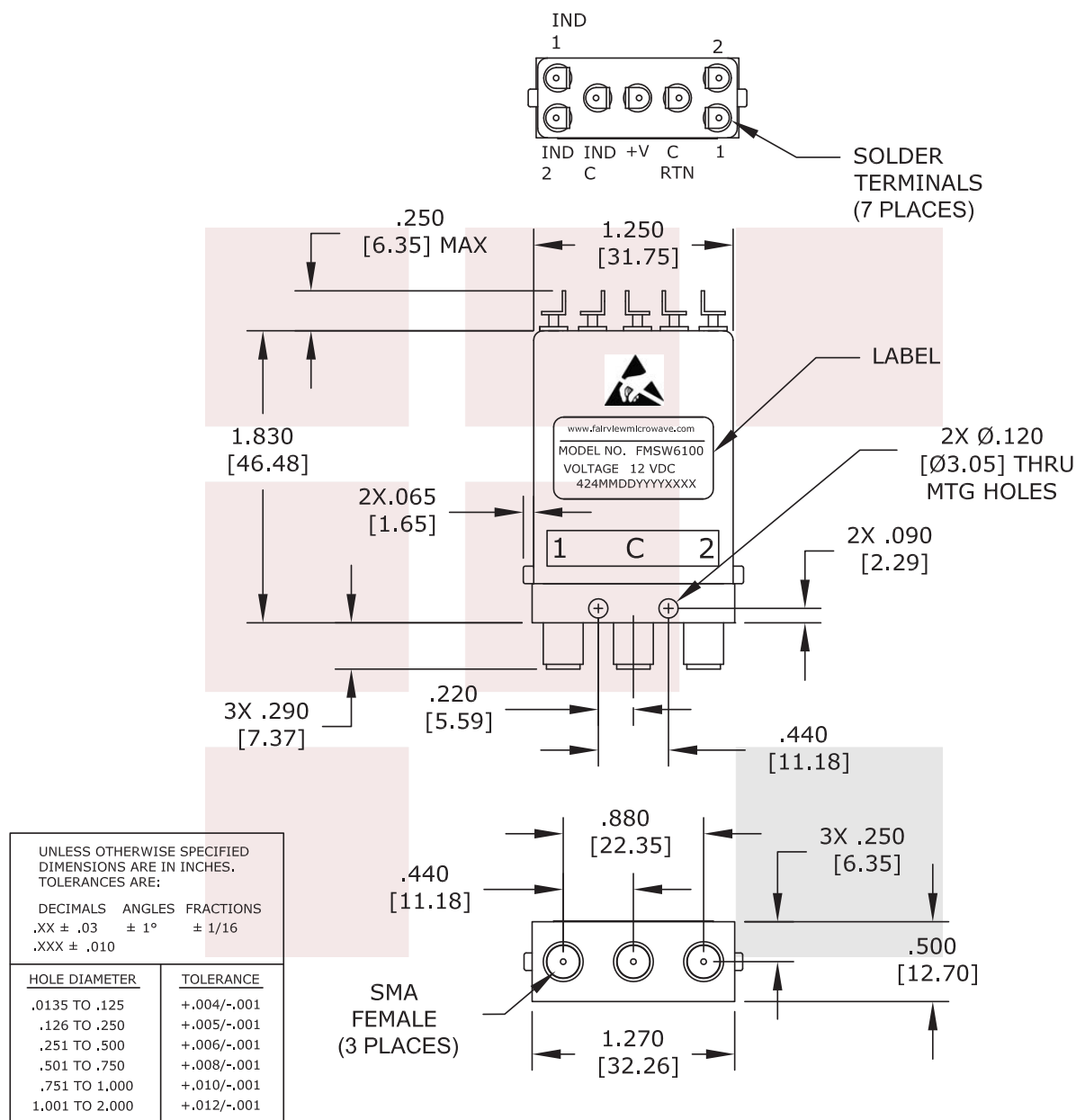


SPDT Latching Electro-Mechanical Relay Switch From DC to 26.5 GHz, 20 Watts with Indicators, TTL, Self Cut Off, Diodes, SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen,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

For additional information on this product, please click the following link: [SPDT Latching Electro-Mechanical Relay Switch From DC to 26.5 GHz, 20 Watts with Indicators, TTL, Self Cut Off, Diodes, SMA FMSW6100](http://www.fairviewmicrowave.com/spdt-latching-electro-mechanical-relay-switch-indicators-ttl-self-cut-off-fm-sw6100-p.aspx)

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* THESE DIMENSIONS AND TOLERANCES
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ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM

NOTES:

1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

TITLE

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Cut Off, Diodes, SMA

DWG NO

FMSW6100

CAGE CODE

3FKR5

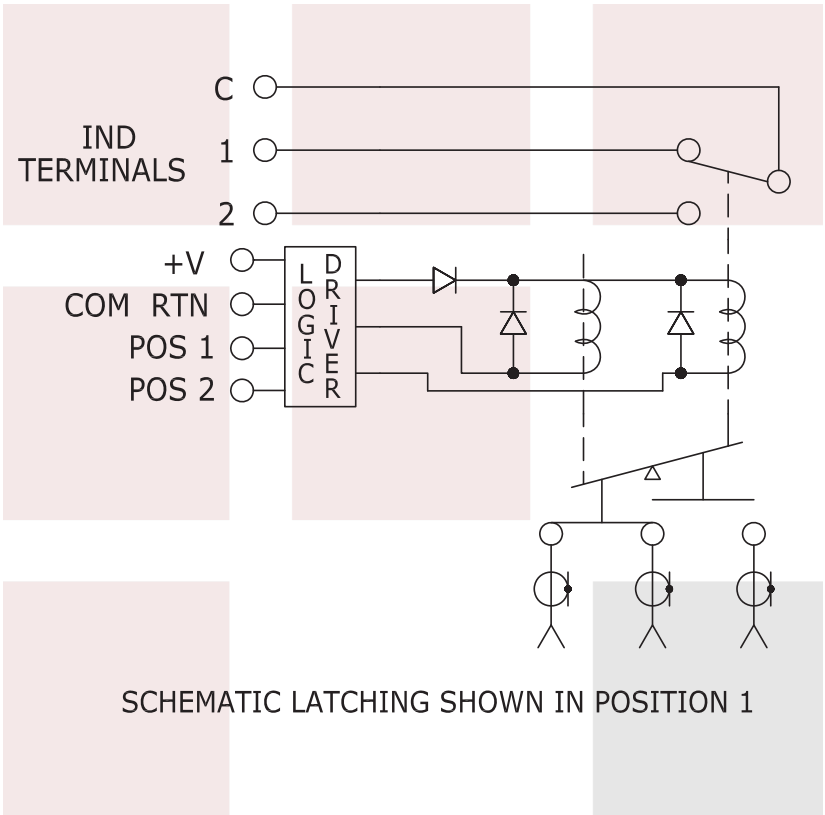
CAD FILE 030915

SHEET

SCALE N/A

SIZE A

200



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