

**Transfer Failsafe Electro-Mechanical Relay  
Switch From DC to 26.5 GHz, 20 Watts, SMA**

The FMSW6110 is a Transfer 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. 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 and is certified as RoHS compliant. External connectors include solder terminals and SMA female connectors.



**Electrical Specifications**

Switch Type: Transfer, Reflective  
Actuator Type: Failsafe  
Switching Sequence: Break Before Make

Description	Min	Typ	Max	Units
Frequency Range	DC		26.5	GHz
Impedance		50		Ohms
Operating Voltage		12		Volts
Actuating Current @ 12 Volts		375		mA
VSWR			1.5:1	
Insertion Loss			0.5	dB
Isolation	60			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	1.2:1	1.3:1	1.4:1	1.5:1	1.5:1	
Insertion Loss, Max	0.2	0.3	0.4	0.5	0.5	dB
Isolation, Min	80	75	70	60	60	dB

**Mechanical Specifications**

**Size**  
 Length: 1.75 in [44.45 mm]  
 Width/Diameter: 2.16 in [54.86 mm]  
 Height: 1.363 in [34.62 mm]  
 Weight: 0.348 lbs [157.85 g]  
 Body Material and Plating: Aluminum  
 Package Type: Connectorized Module  
 Operating Life: 1,000,000 Cycles  
 Switching Time: 35 ms Max

**Features:**

- Transfer Relay Switch
- DC to 26.5 GHz Frequency Range
- 1M Cycle Operating Life Min
- Failsafe Actuator
- Insertion Loss 0.5 dB max
- Isolation 60 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	-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)

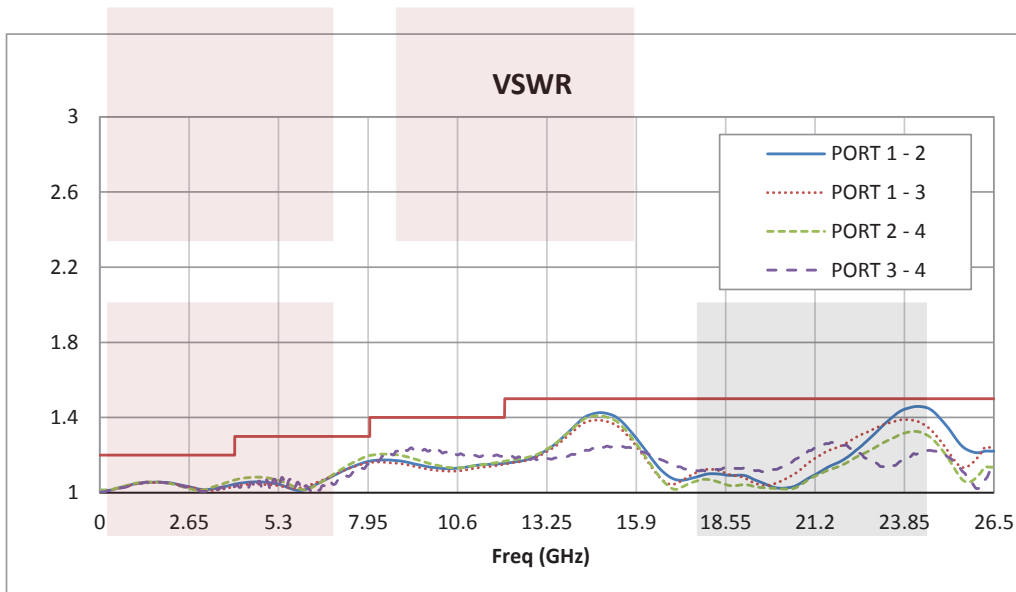
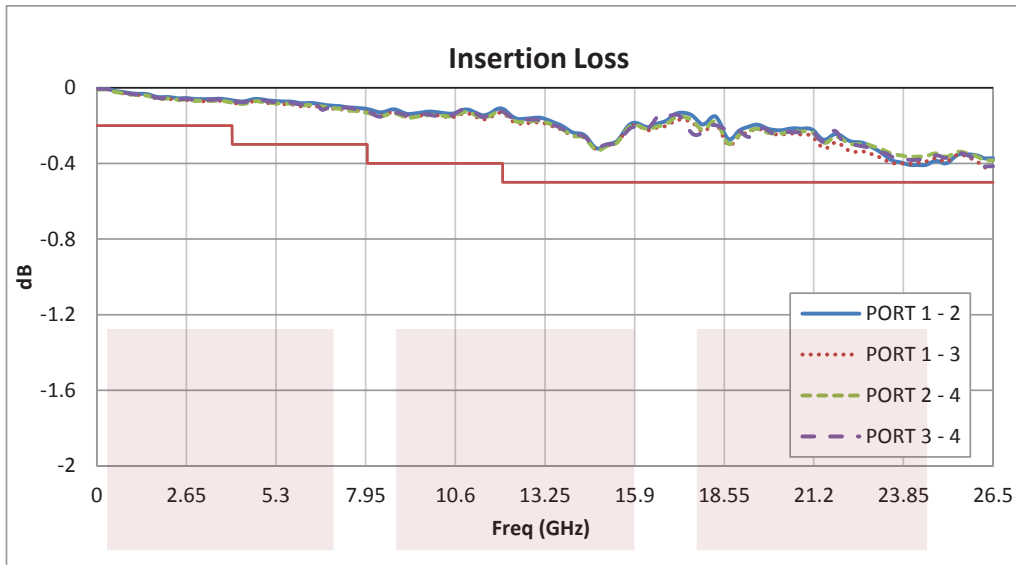
RoHS Compliant

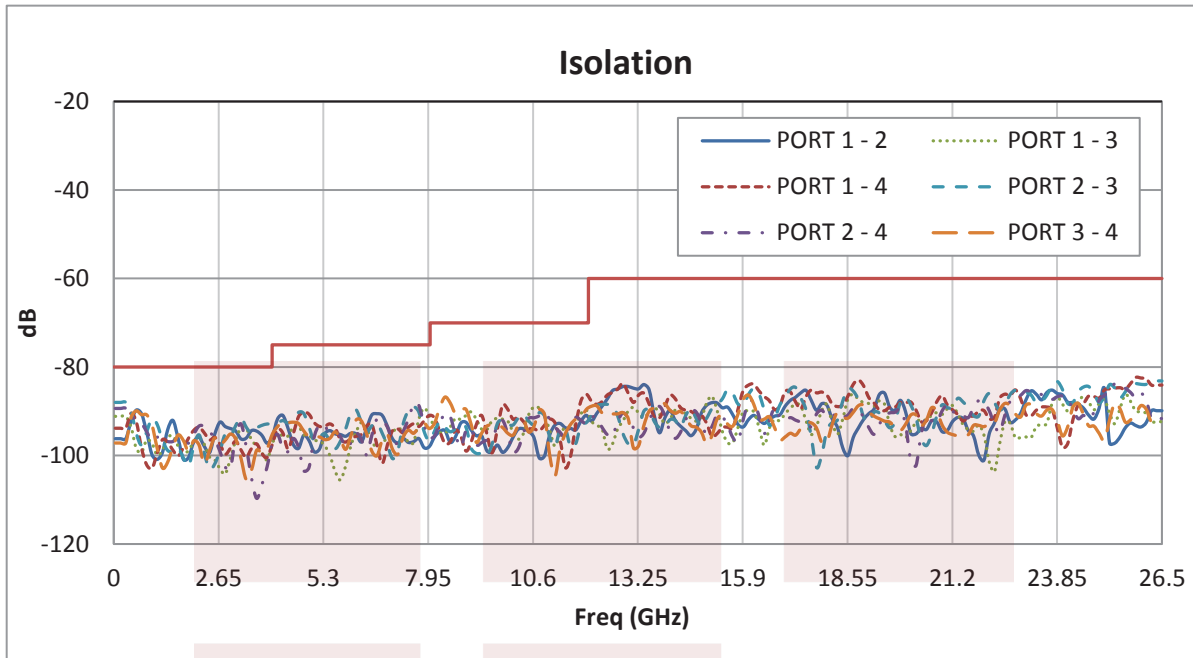
**Plotted and Other Data**

Notes:



**Typical Performance Data**



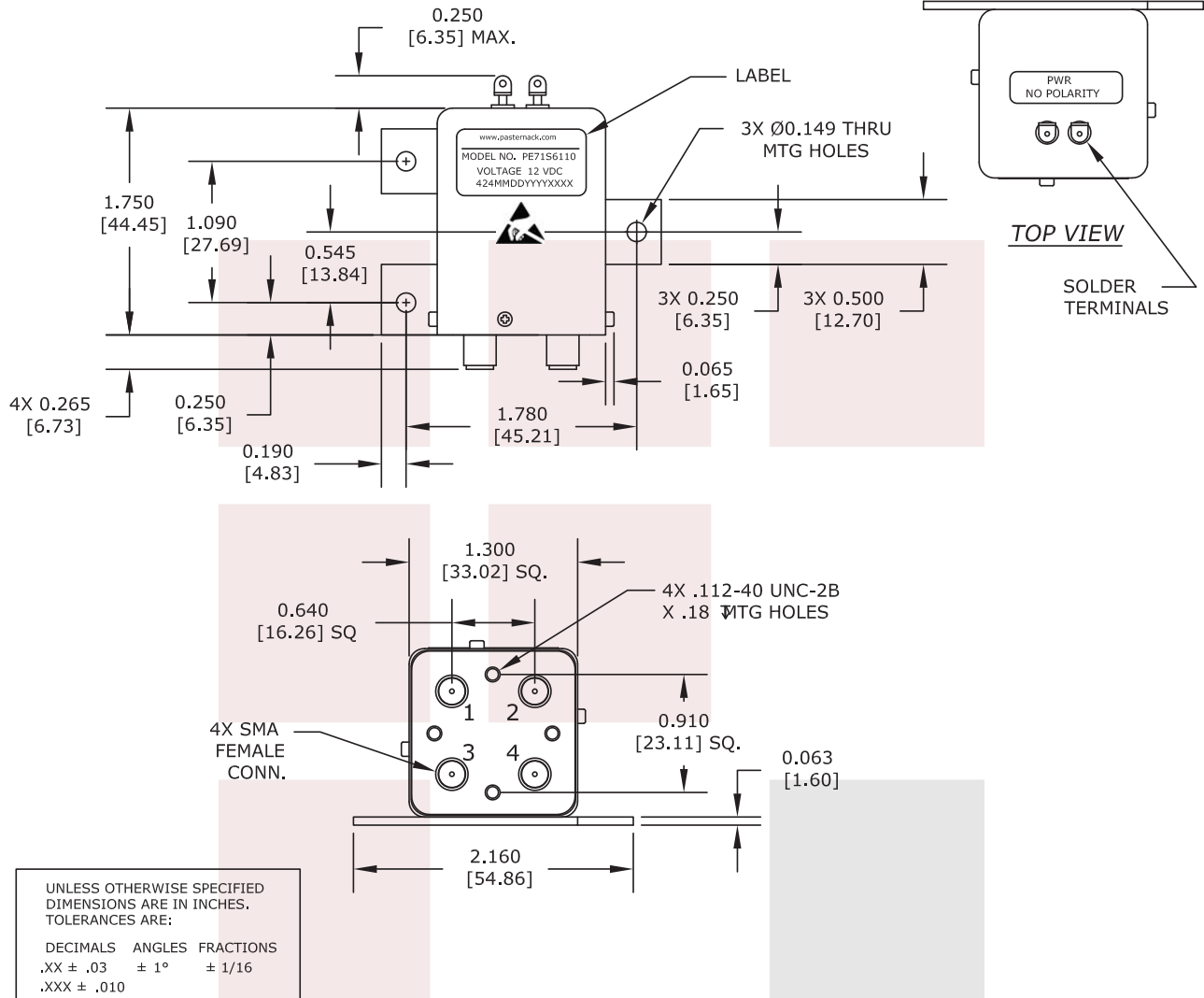


Transfer Failsafe Electro-Mechanical Relay Switch From DC to 26.5 GHz, 20 Watts, SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Transfer Failsafe Electro-Mechanical Relay Switch From DC to 26.5 GHz, 20 Watts, SMA FMSW6110](http://www.fairviewmicrowave.com/transfer-failsafe-electro-mechanical-relay-switch-fmsw6110-p.aspx)

URL: <http://www.fairviewmicrowave.com/transfer-failsafe-electro-mechanical-relay-switch-fmsw6110-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:

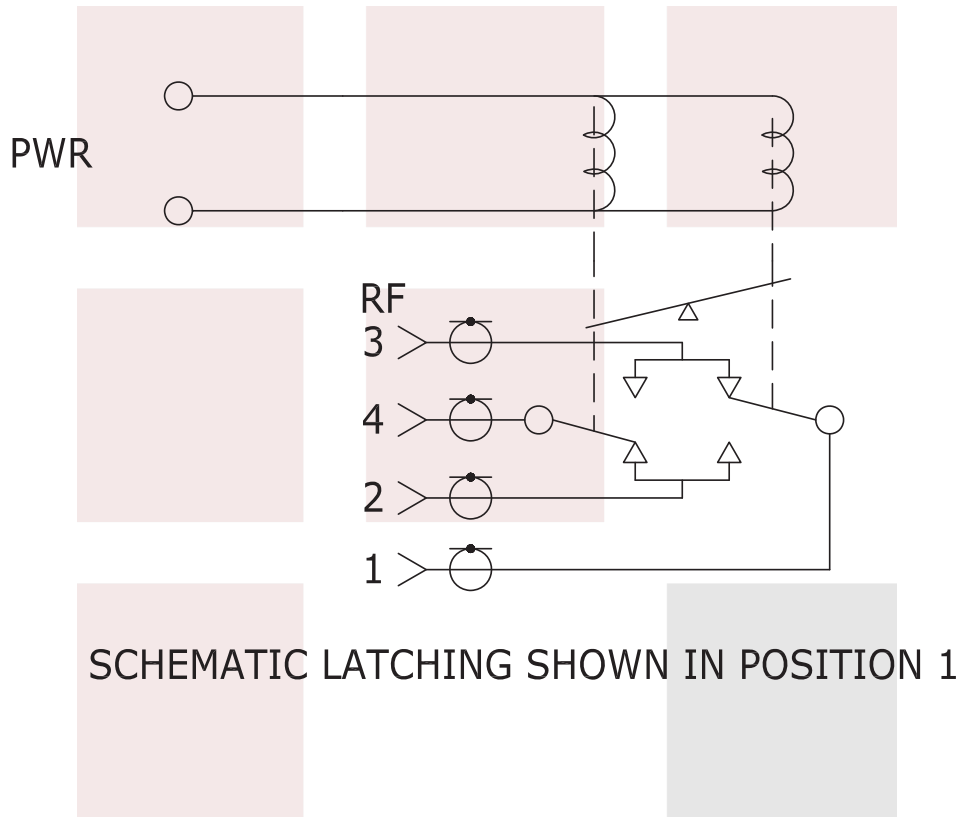
DECIMALS	ANGLES	FRACTIONS
.XX ± .03	± 1°	± 1/16
.XXX ± .010		

HOLE DIAMETER	TOLERANCE
.0135 TO .125	+ .004/- .001
.126 TO .250	+ .005/- .001
.251 TO .500	+ .006/- .001
.501 TO .750	+ .008/- .001
.751 TO 1.000	+ .010/- .001
1.001 TO 2.000	+ .012/- .001

\* THESE DIMENSIONS AND TOLERANCES SUPERSEDE NOTE #1 ON TITLE BLOCK.

RF STATUS		
RF	FAILSAFE	LATCHING
1-3, 2-4	DE-ENERGIZED	POSITION 1
1-2, 3-4	ENERGIZED	POSITION 2

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TITLE Transfer Failsafe Electro-Mechanical Relay Switch From DC to 26.5 GHz, 20 Watts, SMA	DWG NO FMSW6110	CAGE CODE 3FKR5			
CAD FILE 012516	SHEET	SCALE N/A	SIZE A	2233	



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CAD FILE	012516	SHEET	SCALE	N/A	SIZE A 2233