

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

The FMSW6113 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, 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 +28Vdc 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
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		26.5	GHz
Impedance		50		Ohms
Operating Voltage		28		Volts
Actuating Current @ 28 Volts		170		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	1.3:1	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	2.25 in [57.15 mm]
Width/Diameter	2.16 in [54.86 mm]
Height	1.363 in [34.62 mm]
Weight	0.38 lbs [172.37 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
- TTL Logic Driver, Position Indicators, Suppression Diodes
- 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 +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

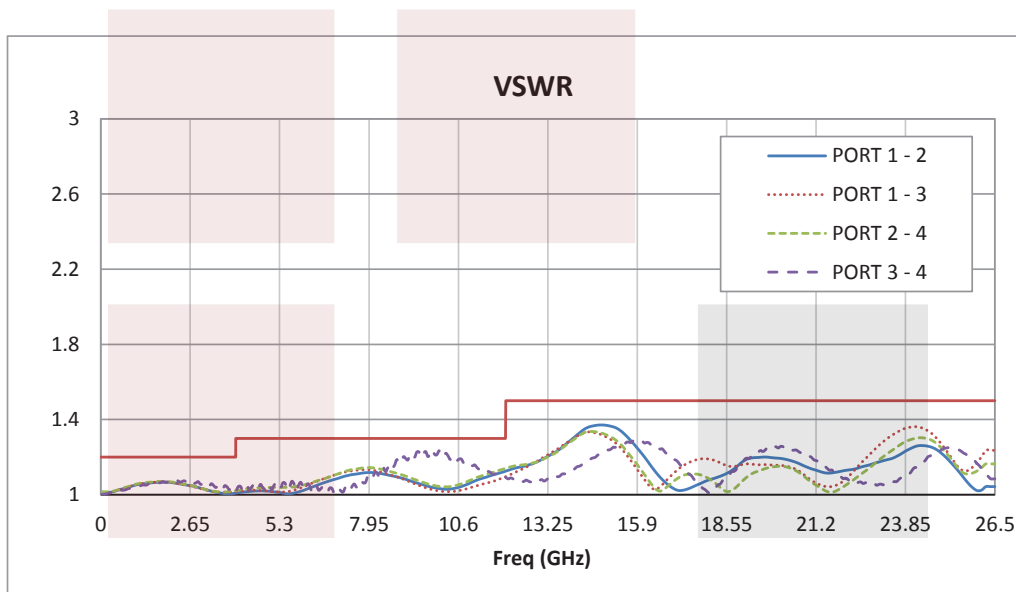
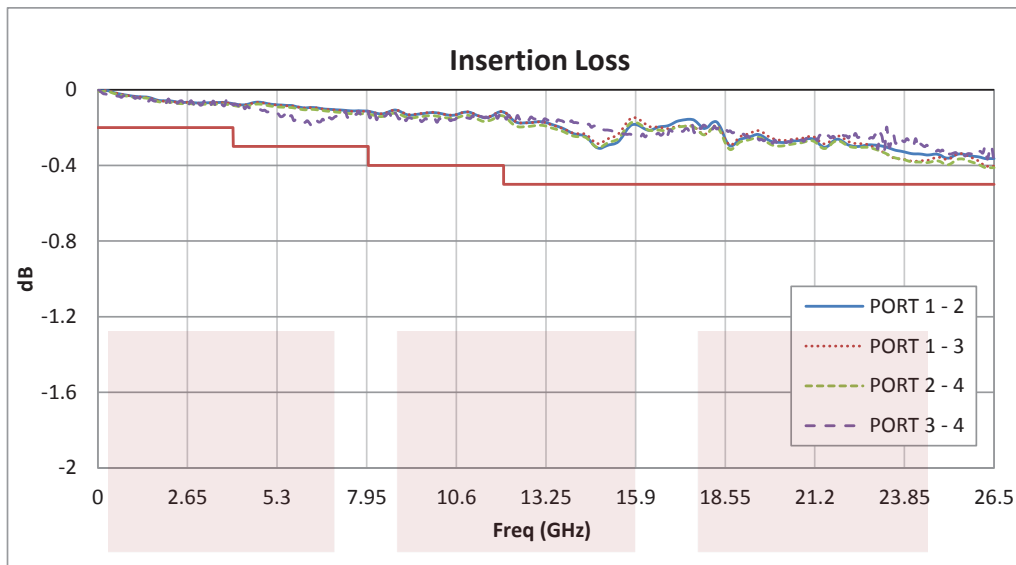
Compliance Certifications (visit www.FairviewMicrowave.com for current document)

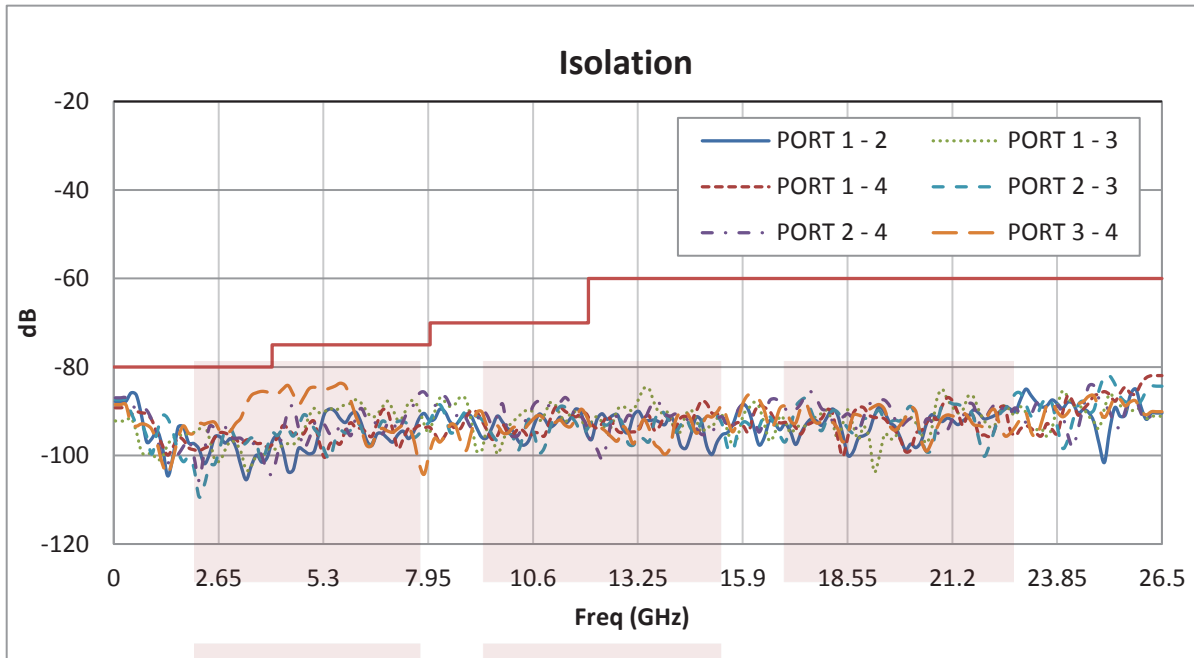
RoHS Compliant

Plotted and Other Data

Notes:

Typical Performance Data



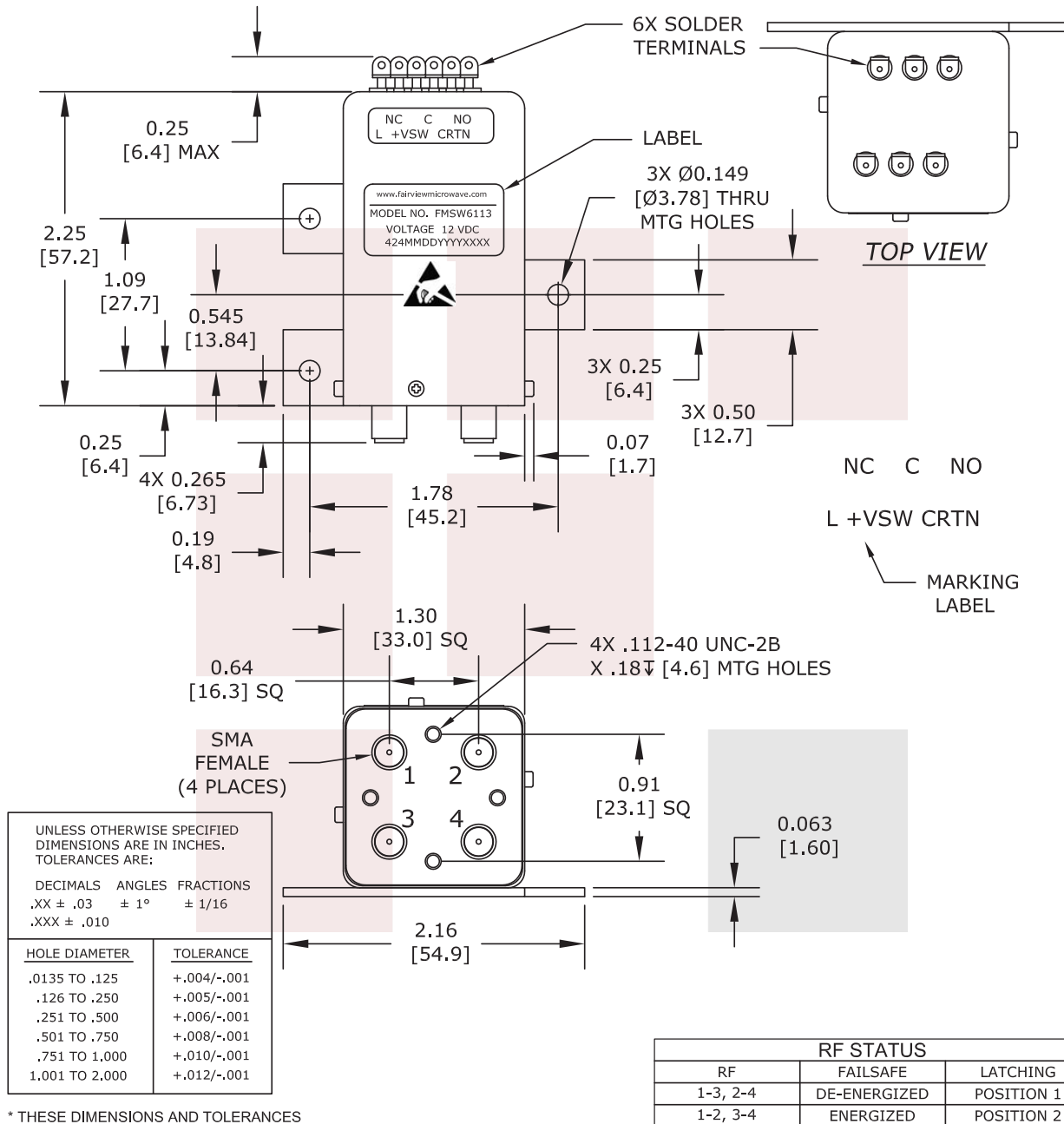


Transfer Failsafe Electro-Mechanical Relay Switch From DC to 26.5 GHz, 20 Watts with Indicators, TTL, Diodes, SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas.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

For additional information on this product, please click the following link: [Transfer Failsafe Electro-Mechanical Relay Switch From DC to 26.5 GHz, 20 Watts with Indicators, TTL, Diodes, SMA FMSW6113](http://www.fairviewmicrowave.com/transfer-failsafe-electro-mechanical-relay-switch-indicators-ttl-fmsw6113-p.aspx)

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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.

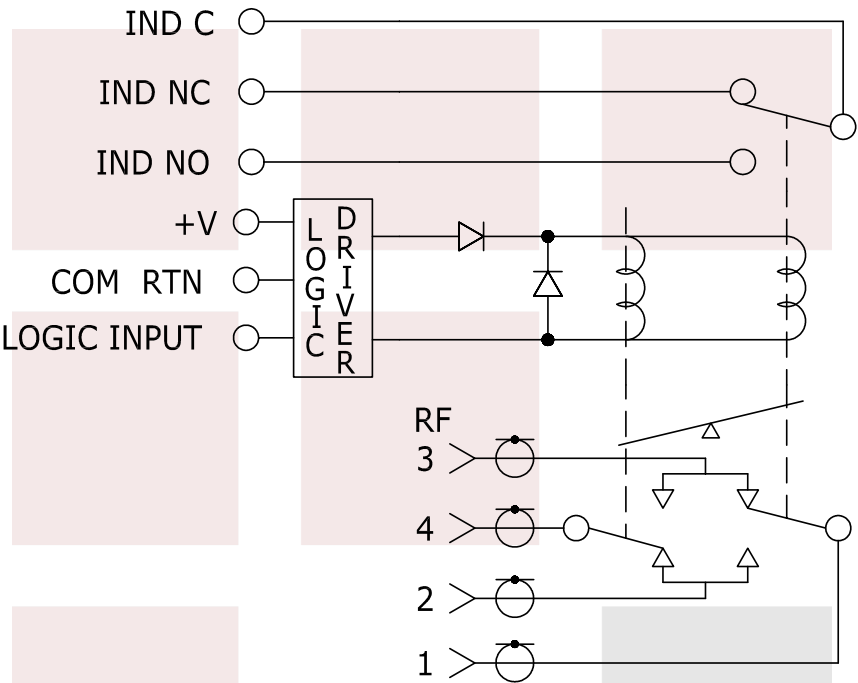


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NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

TITLE
Transfer Failsafe Electro-Mechanical Relay Switch
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DWG NO	FMSW6113		CAGE CODE	3FKR5	
CAD FILE	030915	SHEET	SCALE	N/A	SIZE A 200



SCHEMATIC FAILSAFE SHOWN IN DE-ENERGIZED POSITION

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