

Transfer Latching Electro-Mechanical Relay Switch From DC to 12.4 GHz, 160 Watts with Self Cut Off, Diodes, N

The FMSW6178 is a Transfer Electromechanical Relay Switch that operates over a wide frequency band from DC to 12.4 GHz and has a rating of 160 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 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 +65°C. The assembly requires an operating voltage of +12Vdc. External connectors include solder terminals and N female connectors.

Electrical Specifications

Switch Type	Transfer, Reflective
Actuator Type	Latching
Switching Sequence	Break Before Make
Actuator Options	Self Cut Off, Diodes

Description	Min	Typ	Max	Units
Frequency Range	DC		12.4	GHz
Impedance		50		Ohms
Operating Voltage		12		Volts
Actuating Current @ 12 Volts		320		mA
VSWR			1.45:1	
Insertion Loss			0.4	dB
Isolation	60			dB
Input Power (CW) (at 12.4 GHz)			160	Watts

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC - 4	4 - 8	8 - 12.4			GHz
VSWR, Max	1.2:1	1.3:1	1.45:1			
Insertion Loss, Max	0.2	0.3	0.4			dB
Isolation, Min	80	70	60			dB

Mechanical Specifications

Size	
Length	2.06 in [52.32 mm]
Width/Diameter	2 in [50.8 mm]
Height	2 in [50.8 mm]
Weight	0.875 lbs [396.89 g]
Body Material and Plating	Aluminum
Package Type	Connectorized Module
Operating Life	1,000,000 Cycles
Switching Time	20 ms Max



Features:

- Transfer Relay Switch
- DC to 12.4 GHz Frequency Range
- 1M Cycle Operating Life Min
- Latching Actuator
- Self Cut Off, Suppression Diodes
- Insertion Loss 0.4 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

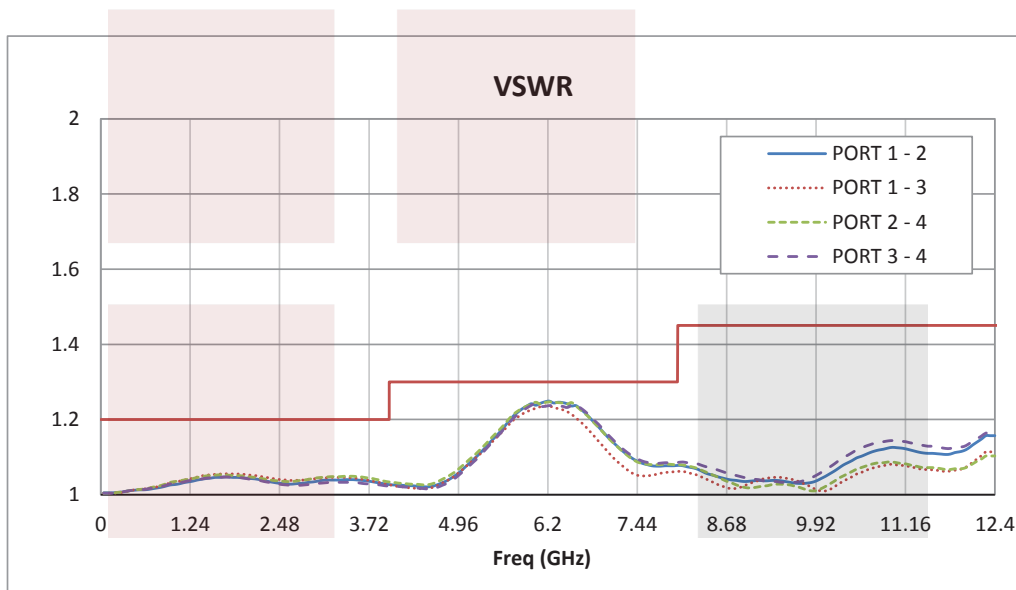
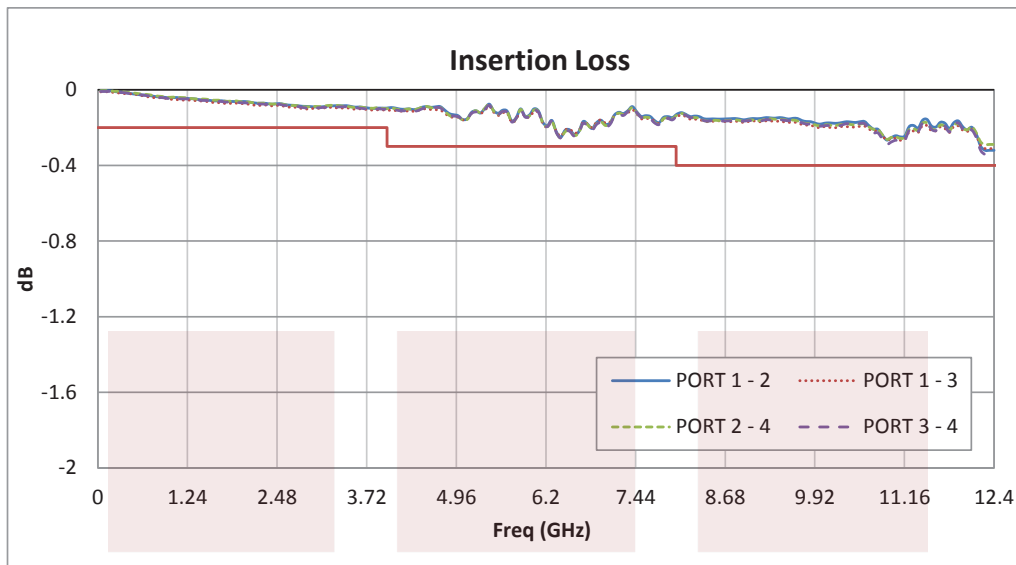
Compliance Certifications (visit www.FairviewMicrowave.com for current document)

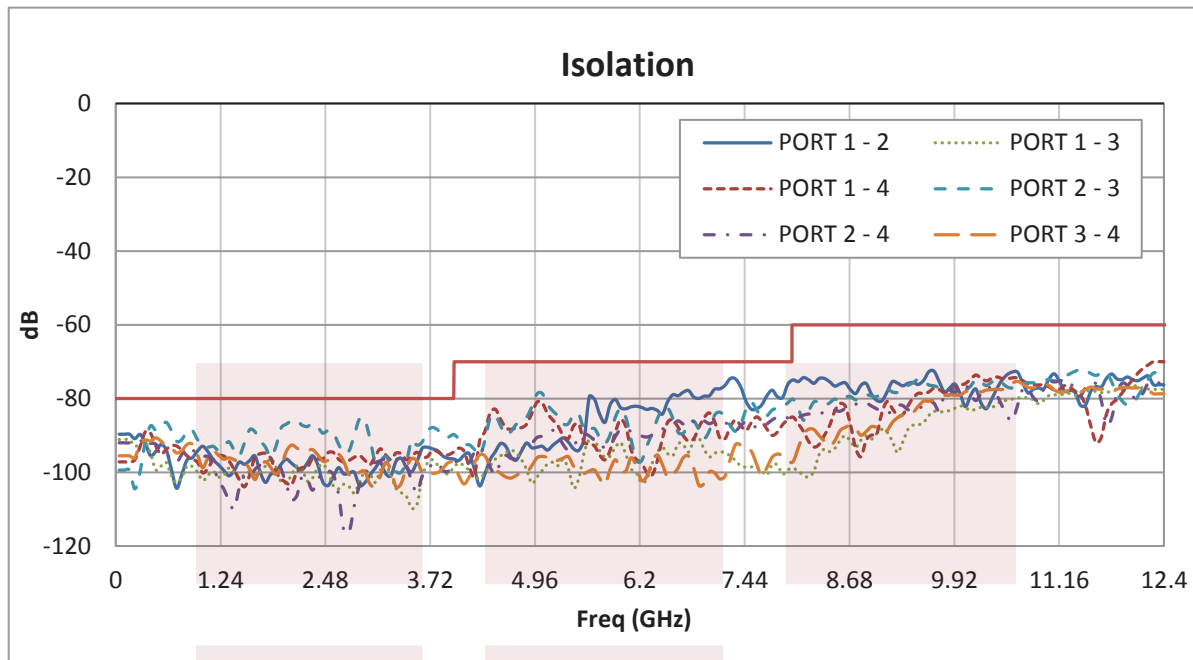
Not RoHS Compliant

Plotted and Other Data

Notes:

Typical Performance Data



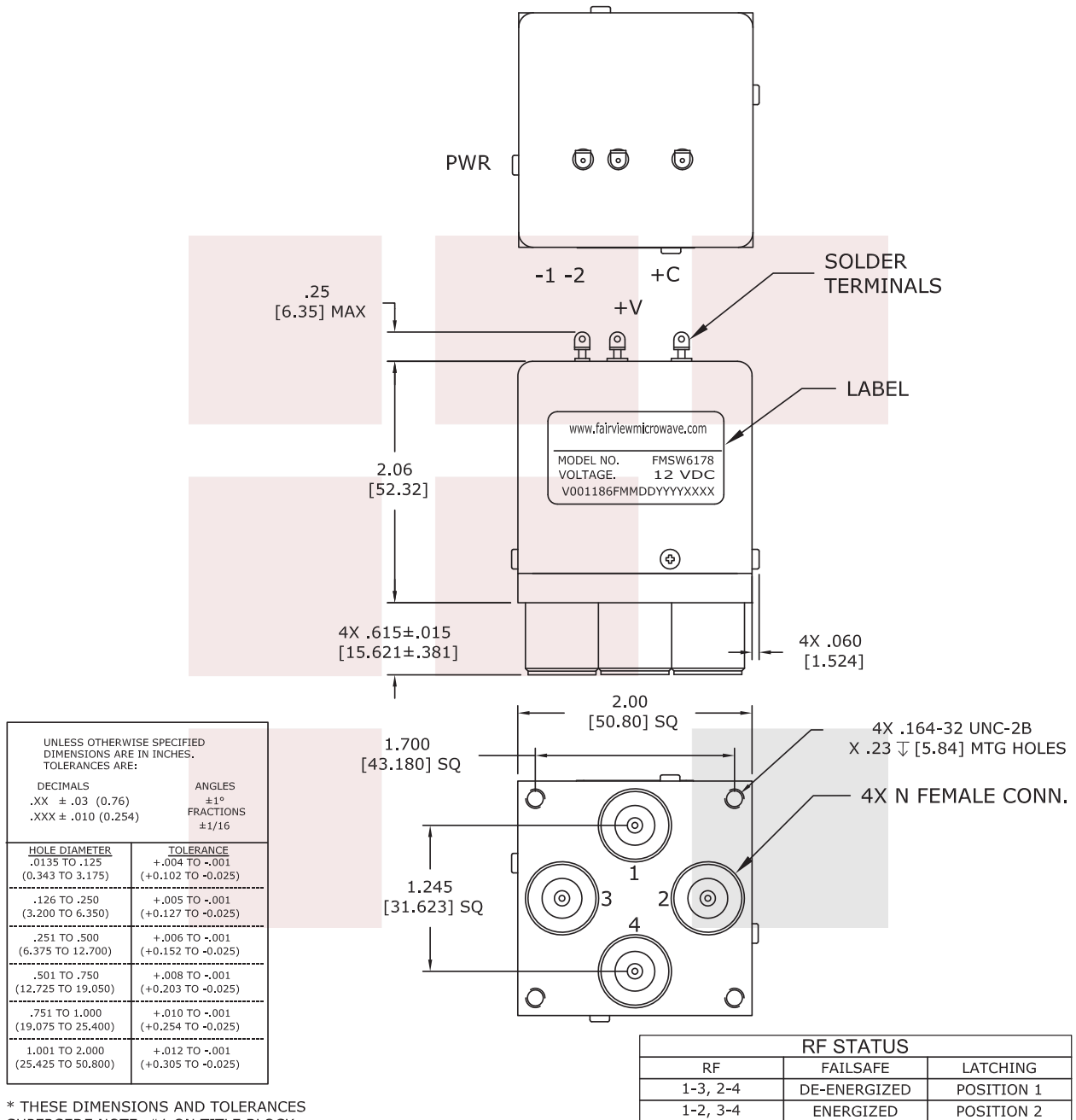


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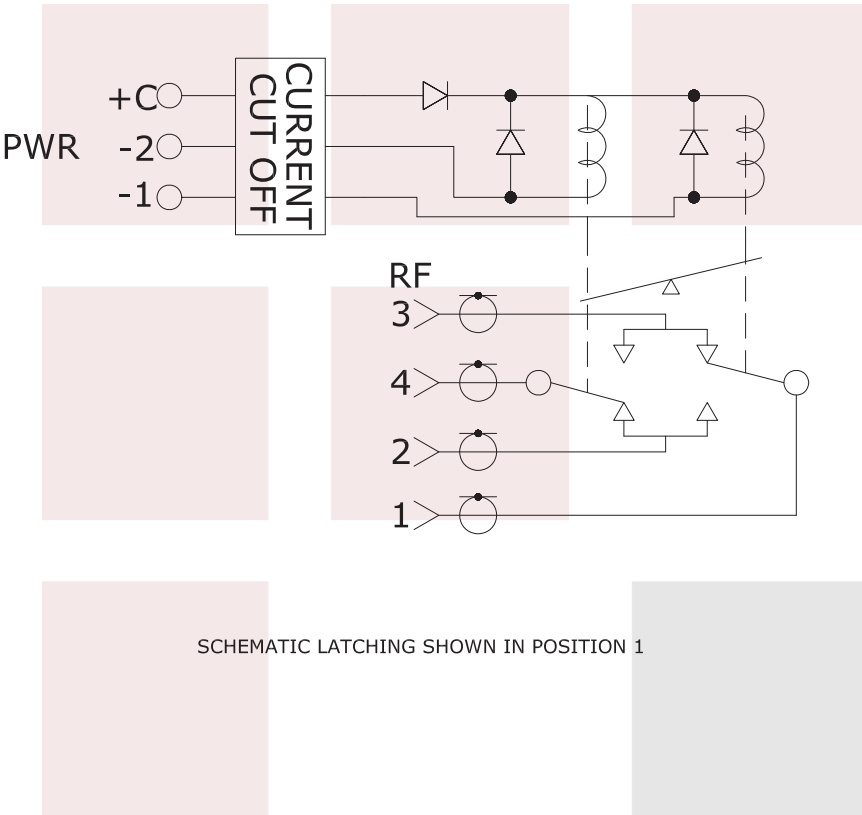
For additional information on this product, please click the following link: [Transfer Latching Electro-Mechanical Relay Switch From DC to 12.4 GHz, 160 Watts with Self Cut Off, Diodes, N FMSW6178](http://www.fairviewmicrowave.com/transfer-latching-electro-mechanical-relay-switch-self-cut-off-fmsw6178-p.aspx)

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	CAD FILE 042815	SHEET	SCALE N/A	SIZE A	2233



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