

Transfer Latching DC to 18 GHz Electro-Mechanical Relay Switch, Indicators, up to 240W, 28V, SMA

The SEMS-4067-DPDT-SMA is a Transfer Electromechanical Relay Switch that operates over a wide frequency band from DC to 18GHz with up to 240 Watts of input power (CW) handling capability. Rated for 2.5M life cycles for high reliability operation, this design uses a Latching Actuator with a break before make configuration and position indicators. The switch exhibits exceptional electrical performance specified from 0.2 dB max for insertion loss and from 80 dB min for isolation, and guaranteed over -40°C to +85°C. The assembly requires an operating voltage of +28Vdc and is certified as RoHS and REACH compliant. External connectors include solder terminals and SMA female connectors.



Electrical Specifications

Switch Type	Transfer
Actuator Type	Latching
Switching Sequence	Break before Make
Actuator Options	Indicators
Polarity	Negative Common
Indicator Rating	1 Watts / 30 Volts / 100 mA

Features:

- Transfer Relay Switch
- DC to 18 GHz Frequency Range
- 2.5M Cycle Operating Life Min
- 100 Watt Avg Power Max
- -40 to +85 Deg C Operating Temperature
- Insertion Loss 0.5 dB Max
- VSWR 1.5:1 Max

Applications:

- General Purpose High Performance Relay Switch
- Military Communications
- Communications Systems
- Test & Measurement

Description	Min	Typ	Max	Units
Frequency Range	DC		18	GHz
Impedance		50		Ohms
Operating Voltage	24	28	30	Volts
Actuating Current @ 28 Volts		125		mA
VSWR			1.5:1	
Insertion Loss			0.5	dB
Isolation	60			dB
Input Power (CW)			100	Watts
Switching Time			15	ms

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC - 3	3 - 8	8 - 12.4	12.4 - 18		GHz
VSWR, Max	1.2:1	1.3:1	1.4:1	1.5:1		
Insertion Loss, Max	0.2	0.3	0.4	0.5		dB
Isolation, Min	80	70	65	60		dB
Power In, Max (CW)	240	150	120	100		Watts

Electrical Specification Notes:
Average Power and Actuating Current values at 25°C.

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Mechanical Specifications

Size

Length	1.53 in [38.86 mm]
Width/Diameter	1.27 in [32.26 mm]
Height	1.33 in [33.78 mm]
Weight	0.195 lbs [88.45 g]
Package Type	Connectorized
Operating Life	2,500,000 Cycles

Connectors

RF Connector Type	SMA Female
RF Connector Specification	MIL C 39012
Control Connector	Solder Pin

Mechanical Specification Notes:
 Solder Pins: 250°C max/30sec.

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
Storage Range	-55 to +85 deg C

Construction	Splashproof
Shock	MIL-STD-202, Method 213B, Cond.G
Vibration	MIL-STD-202, Method 204D, Cond.C

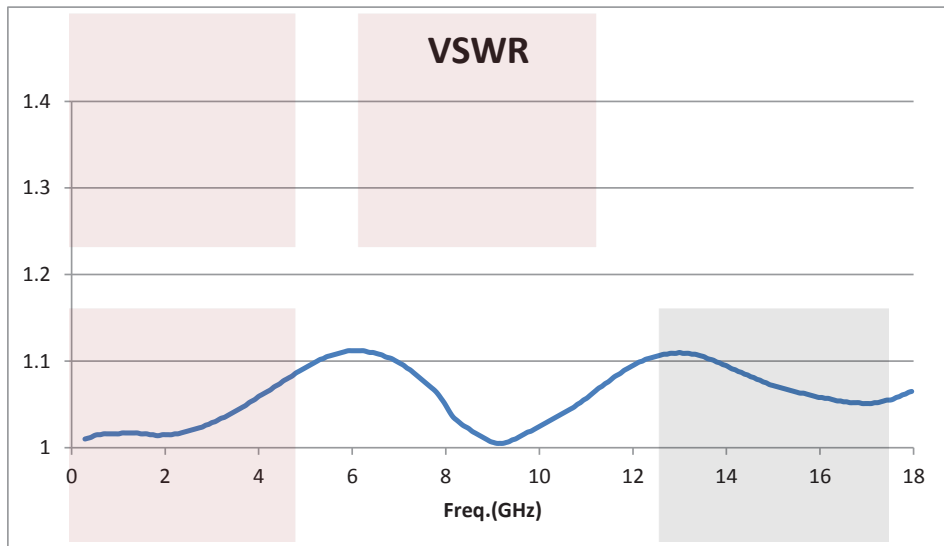
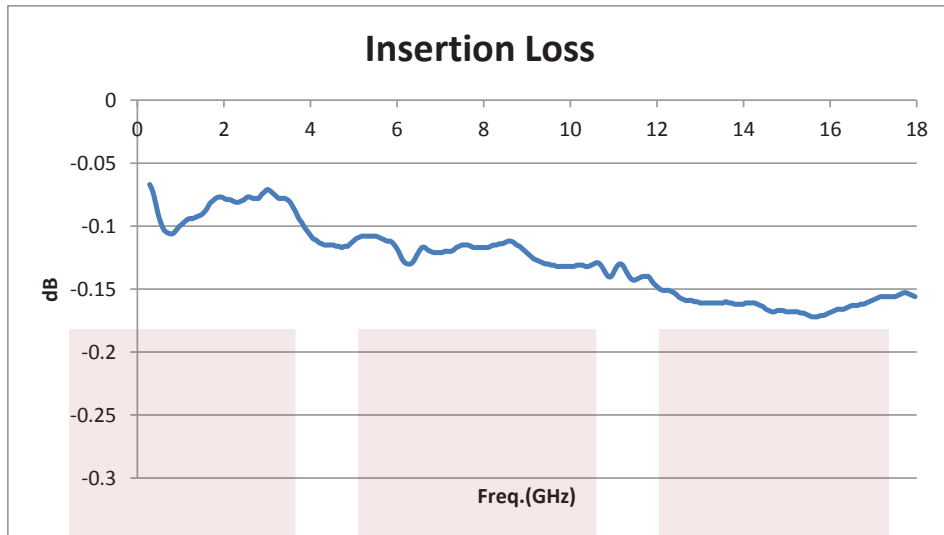
Environmental Specification Notes:
 Environmental specifications are guaranteed but not tested.

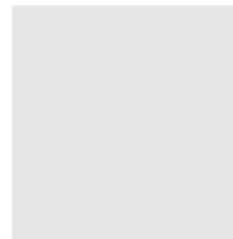
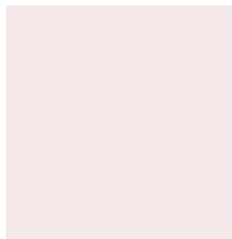
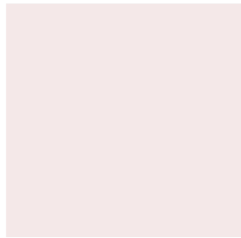
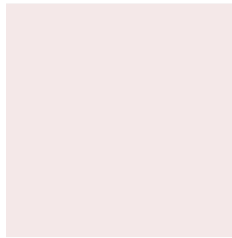
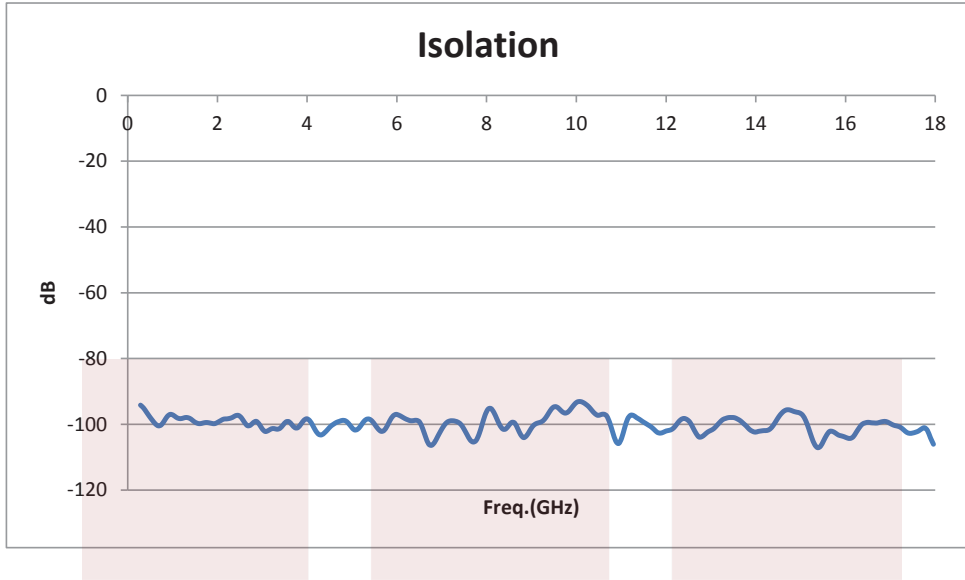
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

- Notes:
- Values shown are typical at 25°C.

Typical Performance Data





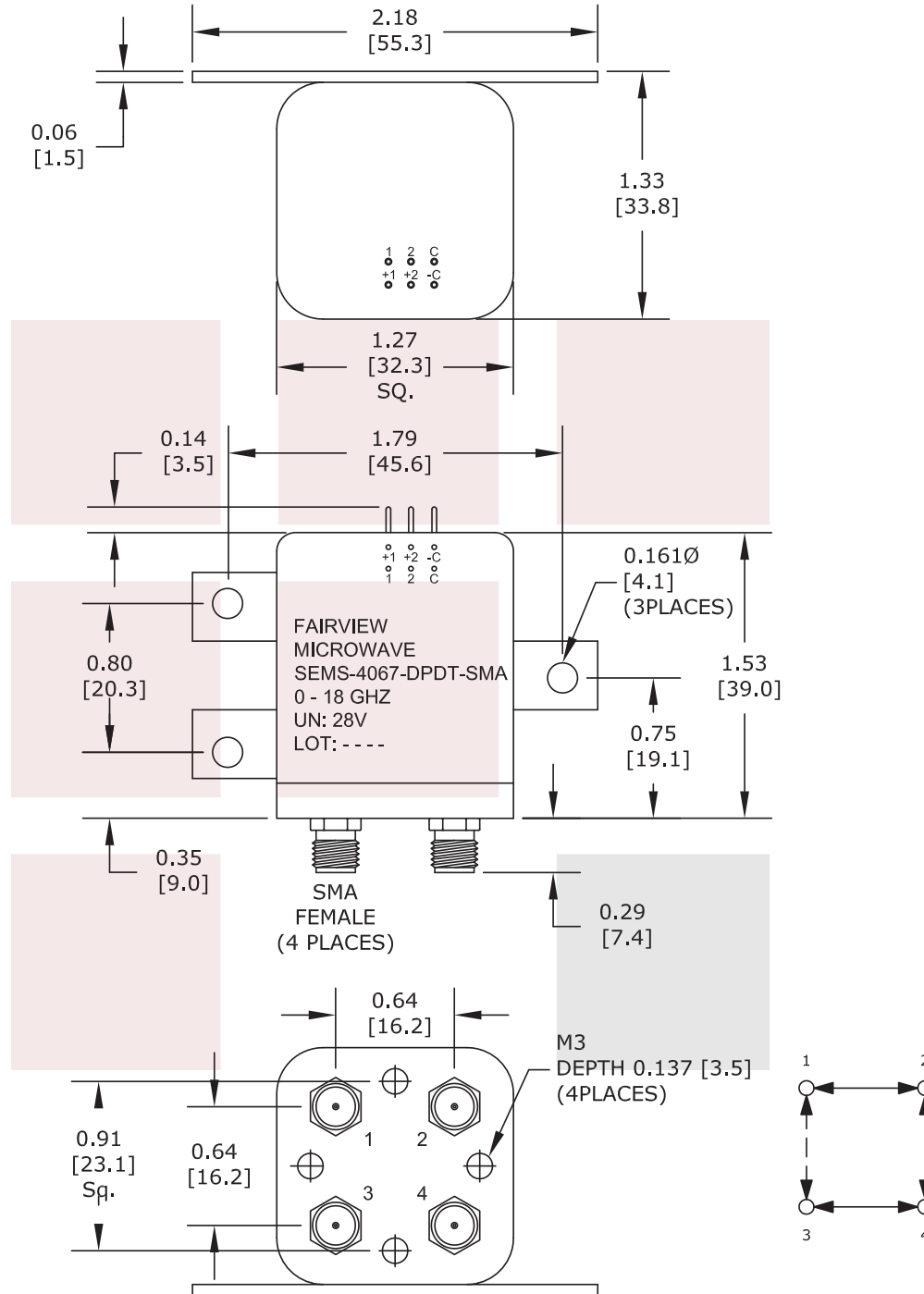
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For additional information on this product, please click the following link: [Transfer Latching DC to 18 GHz Electro-Mechanical Relay Switch, Indicators, up to 240W, 28V, SMA SEMS-4067-DPDT-SMA](#)

URL: <https://www.fairviewmicrowave.com/transfer-latching-electro-mechanical-relay-switch-indicators-sems-4067-dpdt-sma-p.aspx>

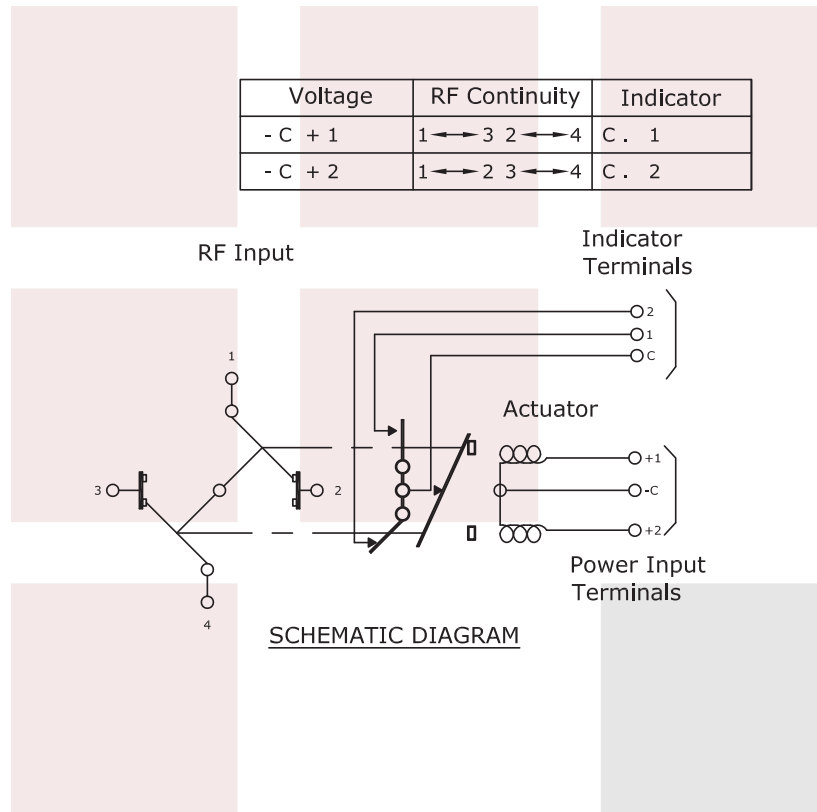
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TITLE		DWG NO		CAGE CODE	
Transfer Latching DC to 18 GHz Electro-Mechanical Relay Switch, Indicators, up to 240W, 28V, SMA		SEMS-4067-DPDT-SMA		3FKR5	
CAD FILE	021517	SHEET	SCALE	N/A	SIZE
				A	2233

Voltage	RF Continuity	Indicator
- C + 1	1 ↔ 3 2 ↔ 4	C . 1
- C + 2	1 ↔ 2 3 ↔ 4	C . 2



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TITLE Transfer Latching DC to 18 GHz Electro-Mechanical Relay Switch, Indicators, up to 240W, 28V, SMA		DWG NO SEMS-4067-DPDT-SMA		CAGE CODE 3FKR5	
CAD FILE	021517	SHEET	SCALE	N/A	SIZE A 2233