

# SR18-SMA2 DATA SHEET

# SPDT Failsafe Electro-Mechanical Relay Switch From DC to 18 GHz, 35 Watts, SMA

The SR18-SMA2 is a SPDT Electromechanical Relay Switch that operates over a wide frequency band from DC to 18 GHz with up to 85 Watts of input power (CW) handling capability. Rated for 1M Life Cycles, 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 from 80 dB min for isolation, and is guaranteed over -40 deg C to +85 deg C. The assembly requires an operating DC voltage of +9 Vdc and is certified as RoHS and REACH compliant. External connectors include solder terminals and SMA female connectors.

### **Electrical Specifications**

Switch Type	
Actuator Type	
Switching Sequence	
Pickup Voltage	
Dropout Voltage	

SPDT, Reflective Failsafe Break before Make 9 Volts 1.5 Volts

Description	Min	Тур	Мах	Units
Frequency Range	DC		18	GHz
Impedance		50		Ohms
Operating Voltage	10	12	14	Volts
Actuating Current @ 12 Vo	lts		190	mA
VSWR			1.5:1	
Insertion Loss			0.5	dB
Isolation	60			dB
Input Power (CW)			35	Watts

### Performance by Frequency

-	-	-				
Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 4	4 to 8	8 to 12.4	12.4 to 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	60	60		dB
Power In, Typ (CW)	85	55	45	35		Watts

### **Mechanical Specifications**

Size Length Width/Diameter Height Weight Body Material and Plating Package Type

Operating Life Switching Time 1.34 in [34.04 mm] 1.88 in [47.75 mm] 0.5 in [12.7 mm]

0.0625 lbs [28.35 g] Aluminum, Black Anodized Connectorized Module

1,000,000 Cycles 15 ms Max



# Features:

- SPDT Switch
- DC to 18 GHz Operating Frequency Range
- 1 M Cycles min
- Failsafe Switch
- Switching Sequence
  Break Before Make

# **Applications:**

- Test & Measurement
- 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





### Connectors

RF Connector TypeSMA FemaleRF Connector Contact Material & PlatingBeryllium Copper, GoldRF Connector Body Material and PlatingPassivated Stainless SteelControl ConnectorSolder Terminals

Mechanical Specification Notes: RF Connector mating requirements per MIL-C-39012

#### **Environmental Specifications**

**Temperature** Operating Range Storage Range

-40 to +85 deg C -55 to +100 deg C

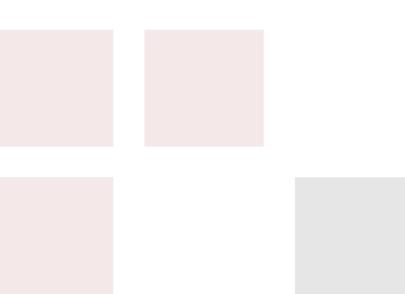
#### Compliance Certifications (visit www.FairviewMicrowave.com for current document)

RoHS Compliant REACH Compliant

12/17/2014

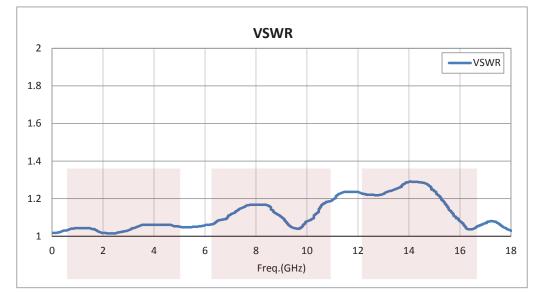
## **Plotted and Other Data**

Notes:

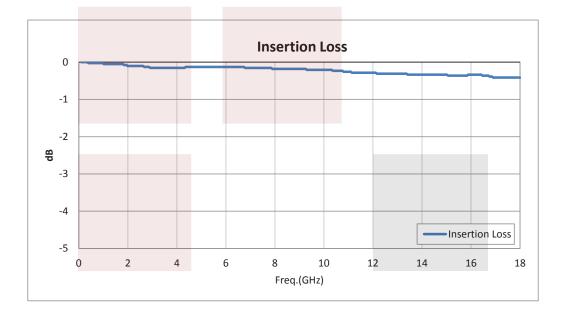








### **Typical Performance Data**



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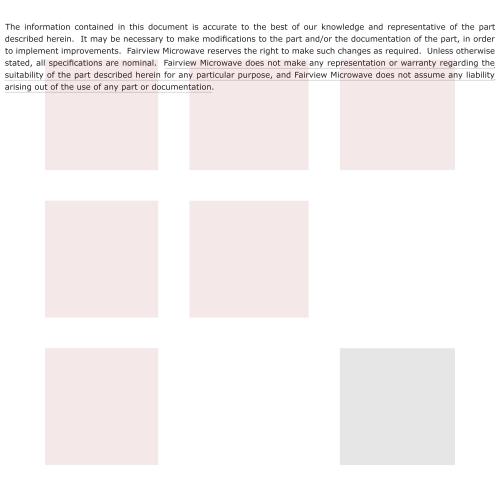




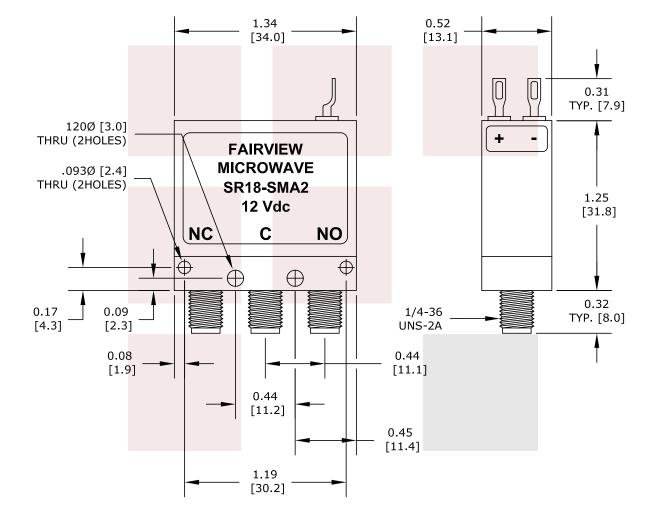
SPDT Failsafe Electro-Mechanical Relay Switch From DC to 18 GHz, 35 Watts, SMA from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: SPDT Failsafe Electro-Mechanical Relay Switch From DC to 18 GHz, 35 Watts, SMA SR18-SMA2

URL: http://www.fairviewmicrowave.com/spdt-failsafe-electro-mechanical-relay-switch-sr18-sma2-p.aspx







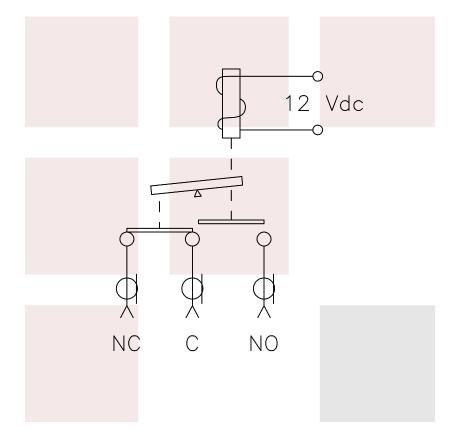
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TITLE SPDT Failsafe Electro-Mechanical Relay Switch From DC to 18 GHz, 35 Watts, SMA	DWG NO SR18-SMA2			CAGE CODE 3FKR5		
	CAD FILE 090815	SHEET	SCAL	E N/A	SIZE A	150

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