

High Power Circulator SMA Female With 18 dB Isolation From 698 MHz to 960 MHz Rated to 1000 Watts

Fairview Microwave carries a broad selection of circulators to fit your needs. These unique devices allow two different direction signals to share the same channel. The classic use of this three port device is for routing signals between an antenna and a transceiver, allowing the receive signal to enter from the antenna (port 1) and exit to the receiver (port 2) while the transmit signal enters from the transmitter (port 3) and exits to the antenna (port 1). The circulator can also be used as an isolator by placing a matched load into one of the ports. These components can be used in antenna transmitting and receiving, radar, amplifier systems and any application that requires isolation from a signal reflection and the ability to send signals in opposite directions down a single channel. These circulators feature excellent insertion loss, high isolation and reliability.

The SFC6996S is a high power single junction circulator that operates from 698 to 960 MHz and can handle up to 1,000 Watts (CW) in the forward and reverse direction. The coaxial part uses SMA female connectors on all ports and has electrical specifications of 1.3:1 max VSWR, 18 dB min isolation and 0.35 dB max insertion loss. The package is REACH and RoHS certified.



Features:

- High Power Single Junction Circulator
- 698 to 960 MHz Frequency Range
- Max Forward and Reverse Power 1,000W (CW)
- Insertion Loss < 0.35 dB
- VSWR < 1.3:1
- Isolation > 18 dB
- SMA Female Connectors

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	698		960	MHz
Impedance		50		Ohms
Insertion Loss			0.35	dB
Isolation	18			dB
VSWR			1.3:1	
Forward Power, CW			1	KWatts
Reverse Power, CW			1	KWatts

Electrical Specification Notes:
Values at 25°C, sea level.

Mechanical Specifications

Size	
Length	1.75 in [44.45 mm]
Width	2 in [50.8 mm]
Height	1.02 in [25.91 mm]
Weight	0.55 lbs [249.48 g]

Configuration

Design	Single Junction
Package Style	Connectorized
Connector 1	SMA Female
Connector 2	SMA Female
Connector 3	SMA Female

Environmental Specifications

Temperature	
Operating Range	-20 to +70 deg C

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

RoHS Compliant	Yes
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Applications:

- Radar Systems
- Military
- Wireless Radio Systems
- Telecom Infrastructure
- Communication Systems
- R&D Labs
- Microwave Radio Systems

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

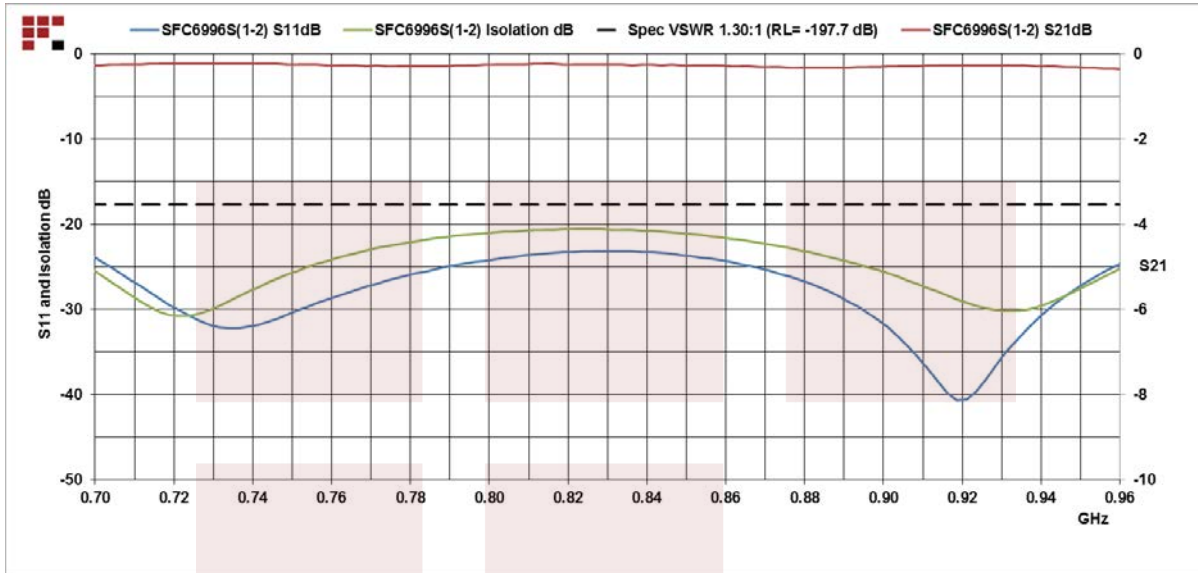
REACH Compliant

12/17/2015

Plotted and Other Data

Notes:

Typical Performance Data

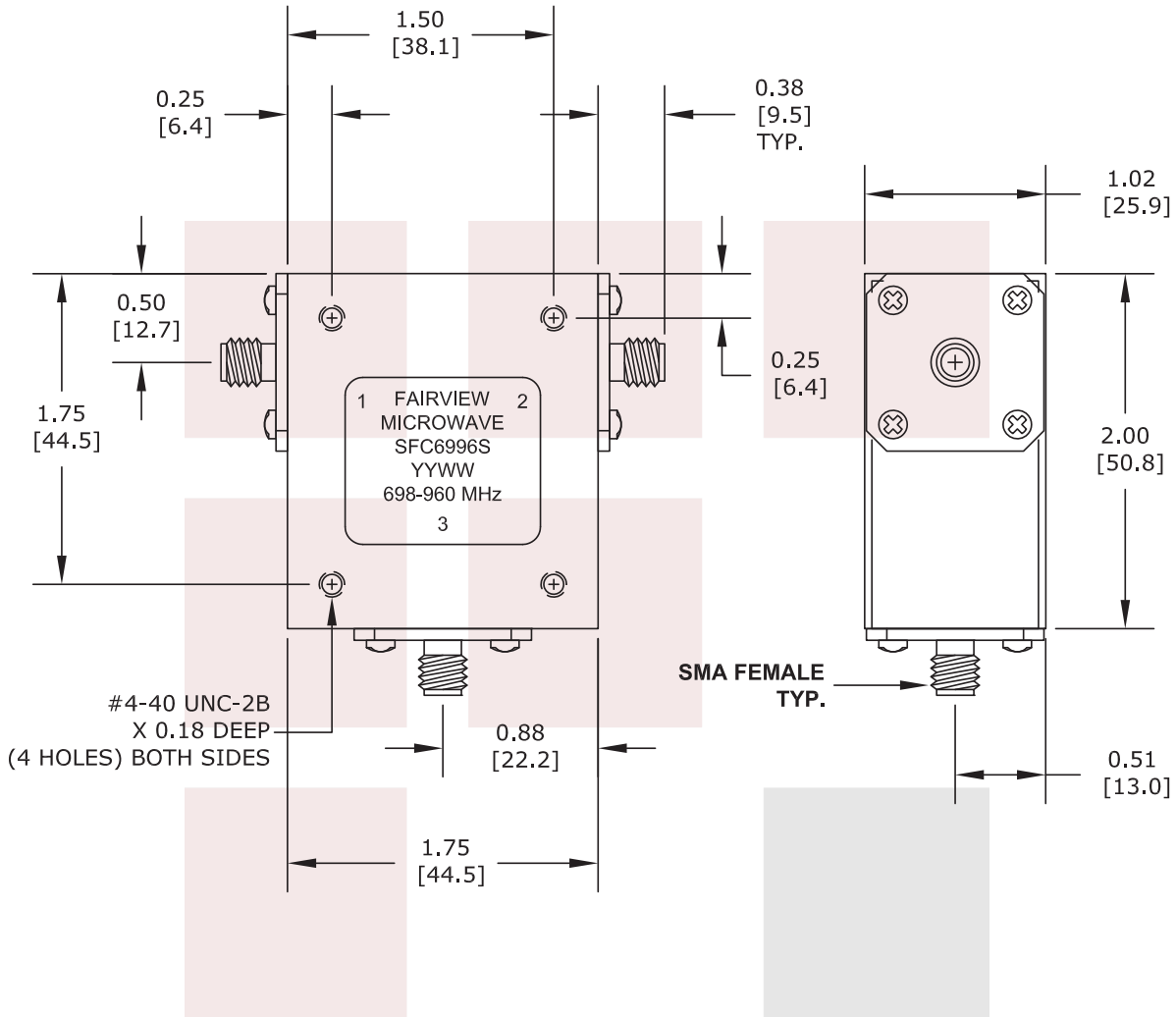


High Power Circulator SMA Female With 18 dB Isolation From 698 MHz to 960 MHz Rated to 1000 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [High Power Circulator SMA Female With 18 dB Isolation From 698 MHz to 960 MHz Rated to 1000 Watts SFC6996S](#)

URL: <http://www.fairviewmicrowave.com/sma-circulator-18-db-isolation-698-960-mhz-1000-watts-sfc6996s-p.aspx>

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STANDARD TOLERANCES	
.XX	±0.01
.XXX	±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

FAIRVIEW MICROWAVE INC. ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		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 High Power Circulator SMA Female With 18 dB Isolation From 698 MHz to 960 MHz Rated to 1000 Watts		DWG NO SFC6996S		CAGE CODE 3FKR5	
CAD FILE	041316	SHEET	SCALE	N/A	SIZE A 3045