

**Circulator SMA Female With 18 dB Isolation From 700 MHz to 800 MHz Rated to 10 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 SFC0780S is a single junction circulator that operates from 700 to 800 MHz and can handle up to 10 Watts (CW) in the forward direction. The coaxial part uses SMA female connectors on all ports and has electrical specifications of 18 dB min isolation, 0.5 dB typ insertion loss and 1.25:1 max VSWR. The package is RoHS compliant.

**Electrical Specifications**

Description	Min	Typ	Max	Units
Frequency Range	700		800	MHz
Impedance		50		Ohms
Insertion Loss		0.5		dB
Isolation	18			dB
VSWR			1.25:1	
Forward Power, CW			10	Watts

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

**Mechanical Specifications**

Size	
Length	1.26 in [32 mm]
Width	0.71 in [18.03 mm]
Height	1.34 in [34.04 mm]
Weight	0.209 lbs [94.8 g]
Body Material and Plating	Aluminum

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

**Environmental Specifications**

**Compliance Certifications** (visit [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com) for current document)

RoHS Compliant	Yes
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**Features:**

- Single Junction Circulator
- 700 to 800 MHz Frequency Range
- Max Forward Power 10W (CW)
- Insertion Loss 0.5 dB Typ
- VSWR < 1.25:1
- Isolation > 18 dB
- SMA Female Connectors

**Applications:**

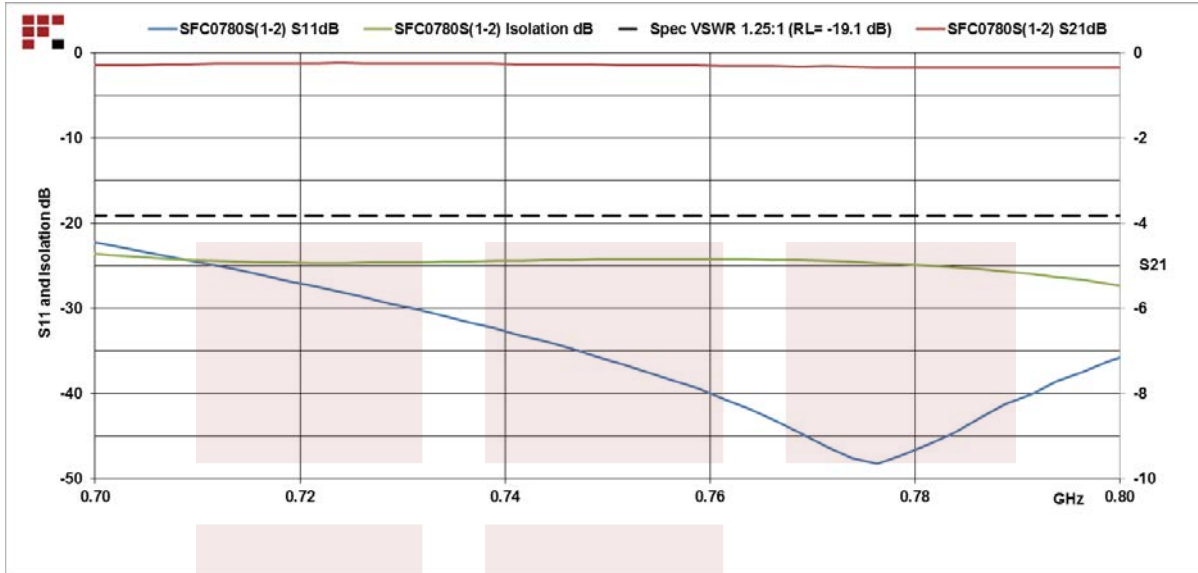
- Radar Systems
- Military
- Wireless Radio Systems
- Telecom Infrastructure
- Communication Systems
- R&D Labs
- Microwave Radio Systems

Fairview Microwave  
 1130 Junction Dr. #100  
 Allen, TX 75013  
 Tel: 1-800-715-4396 / (972) 649-6678  
 Fax: (972) 649-6689  
[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

**Plotted and Other Data**

Notes:

**Typical Performance Data**

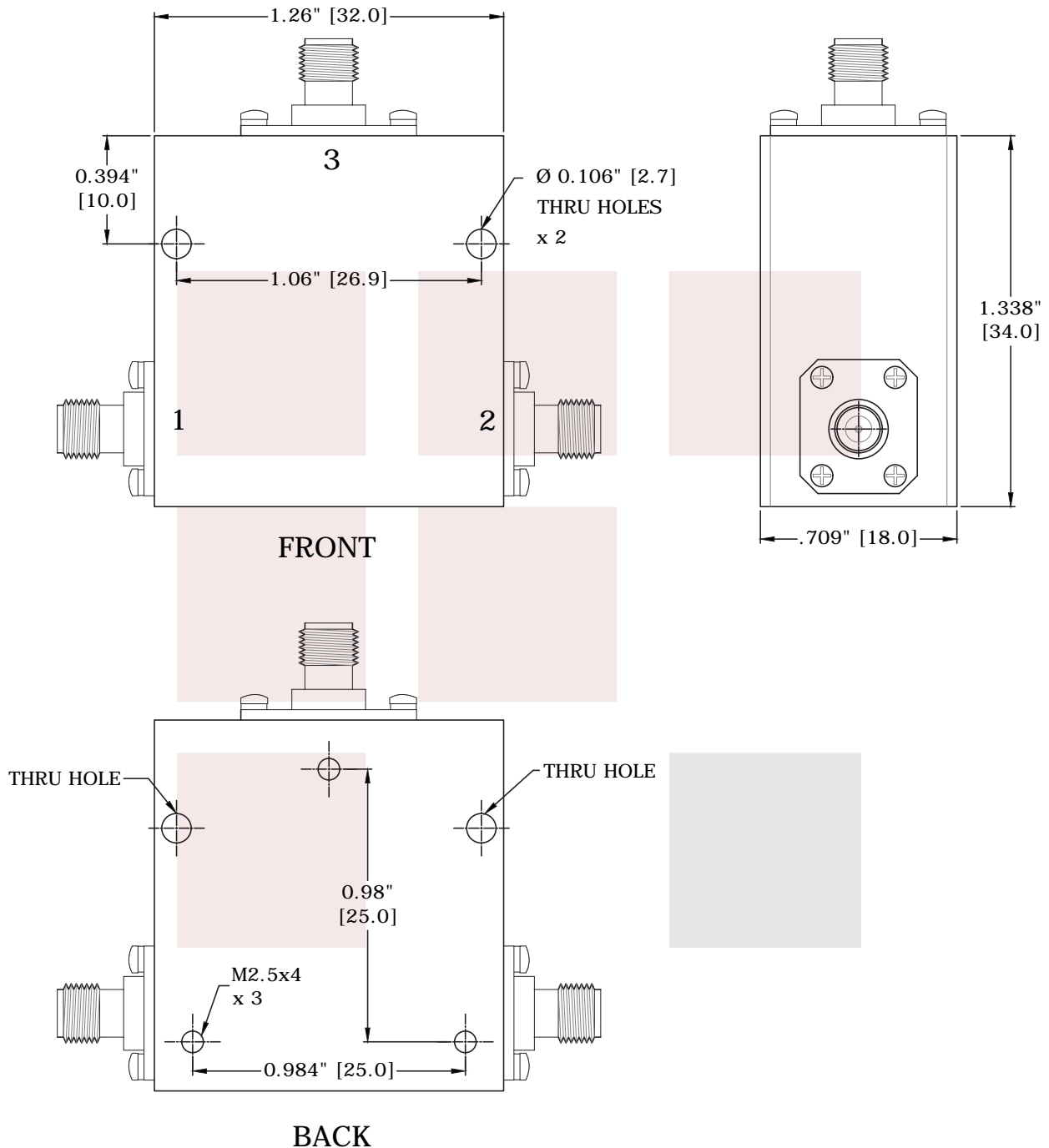


Circulator SMA Female With 18 dB Isolation From 700 MHz to 800 MHz Rated to 10 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Circulator SMA Female With 18 dB Isolation From 700 MHz to 800 MHz Rated to 10 Watts SFC0780S](#)

URL: <http://www.fairviewmicrowave.com/sma-circulator-18-db-isolation-700-800-mhz-sfc0780s-p.aspx>

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TITLE Circulator SMA Female With 18 dB Isolation From 700 MHz to 800 MHz Rated to 10 Watts	DWG NO <b>SFC0780S</b>		CAGE CODE <b>3FKR5</b>		
	CAD FILE 012216	SHEET	SCALE N/A	SIZE A	5568