

## SFI2731 DATA SHEET

# Isolator 2.92mm Female With 20 dB Isolation From 27 GHz to 31 GHz Rated to 5 Watts

The SFI2731 is a single junction isolator offering a forward power rating of 5 Watts CW and reverse power rating of 2 Watts CW over an operational frequency band of 27 to 31 GHz. This coaxial isolator uses 2.92mm female connectors on all ports and has a minimum of 20 dB isolation.

Fairview Microwave offers a wide variety of isolators to fit your needs. These are two-port devices that transmit microwave or radio frequency power in one direction only and block the signal in the opposite direction. They can be thought of as a diode for RF energy. Isolators are used to isolate equipment from the effects of conditions outside of the equipment. For instance they are used to prevent a microwave source being detuned by a mismatched load. Fairview Microwave's isolators feature excellent insertion loss, high isolation and reliability.

## **Electrical Specifications**

Description	Min	Тур	Max	Units	
Frequency Range	27		31	GHz	
Impedance		50		Ohms	
Insertion Loss			1.25	dB	
Isolation	20			dB	
VSWR			1.25:1		
Forward Power, CW			5	Watts	
Forward Power, Peak			30	Watts	
Reverse Power, CW			2	Watts	

#### **Electrical Specification Notes:**

Values at 25°C, sea level.

## **Mechanical Specifications**

Size

 Length
 0.5 in [12.7 mm]

 Width
 0.7 in [17.78 mm]

 Height
 0.5 in [12.7 mm]

 Weight
 0.052 lbs [23.59 g]

#### Configuration

Design Single Junction
Package Style Connectorized
Connector 1 2.92mm Female
Connector 2 2.92mm Female

#### **Environmental Specifications**

**Temperature** 

Operating Range -20 to +65 deg C

**Compliance Certifications** (see product page for current document)

#### **Plotted and Other Data**

Notes:



### **Features:**

- 27 to 31 GHz Frequency Range
- Max Forward Power 5 Watts CW
- Max Reverse Power 2 Watts CW
- Insertion Loss < 1.25 dB</li>
- VSWR < 1.25:1
- Isolation > 20 dB
- 2.92mm Female Connectors

## **Applications:**

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

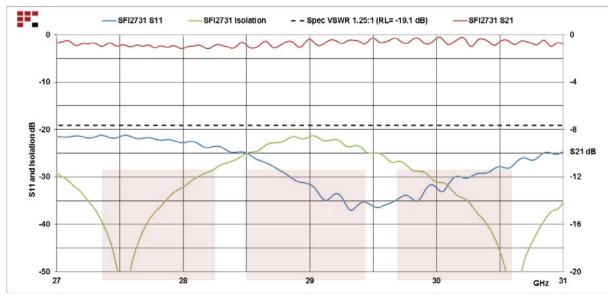
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#### **Typical Performance Data**



Isolator 2.92mm Female With 20 dB Isolation From 27 GHz to 31 GHz Rated to 5 Watts from Fairview Microwave is instock 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.

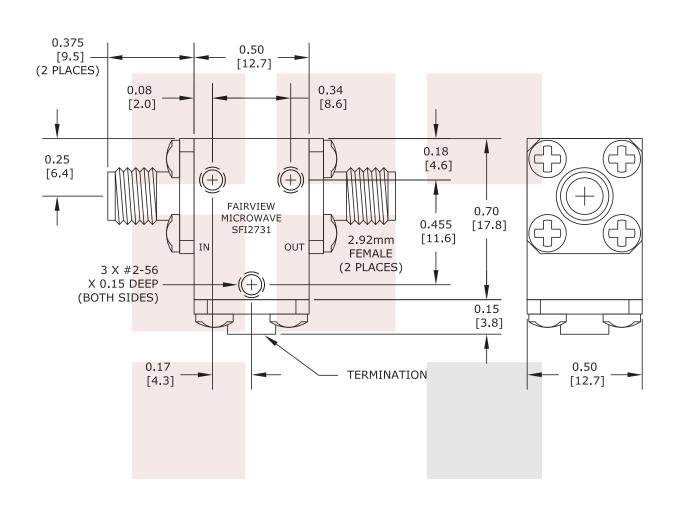
For additional information on this product, please click the following link: Isolator 2.92mm Female With 20 dB Isolation From 27 GHz to 31 GHz Rated to 5 Watts SFI2731

URL: https://www.fairviewmicrowave.com/2.92mm-isolator-20-db-isolation-27-31-ghz-5-watts-sfi2731-p.aspx

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STANDARD TOLERANCES

.X ±0.2 .XX ±0.1 .XXX ±0.05

\*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].						
Isolator 2.92mm Female With 20 dB Isolation From 27 GHz to 31 GHz Rated to 5 Watts	DWG NO SFI2731			CAGE CODE 3FKR5			
	CAD FILE 072916	SHEET	SCAL	E N/A	SIZE A	2233	