

High Power Isolator N Female With 20 dB Isolation From 380 MHz to 460 MHz Rated to 100 Watts

The SFI3846N is a high power single junction isolator offering a forward power rating of 100 Watts CW and reverse power rating of 30 Watts CW over an operational frequency band of 380 to 460 MHz. This coaxial isolator uses N 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	Typ	Max	Units
Frequency Range	380		460	MHz
Impedance		50		Ohms
Insertion Loss			0.35	dB
Isolation	20			dB
VSWR			1.25:1	
Forward Power, CW			100	Watts
Forward Power, Peak			1	KWatts
Reverse Power, CW			30	Watts

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

Mechanical Specifications

Size	
Length	2.5 in [63.5 mm]
Width	2.5 in [63.5 mm]
Height	1.02 in [25.91 mm]

Configuration

Design	Single Junction
Direction	1 to 2
Package Style	Connectorized
Connector 1	N Female
Connector 2	N Female

Environmental Specifications

Temperature	
Operating Range	-20 to +70 deg C

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

Plotted and Other Data

Notes:



Features:

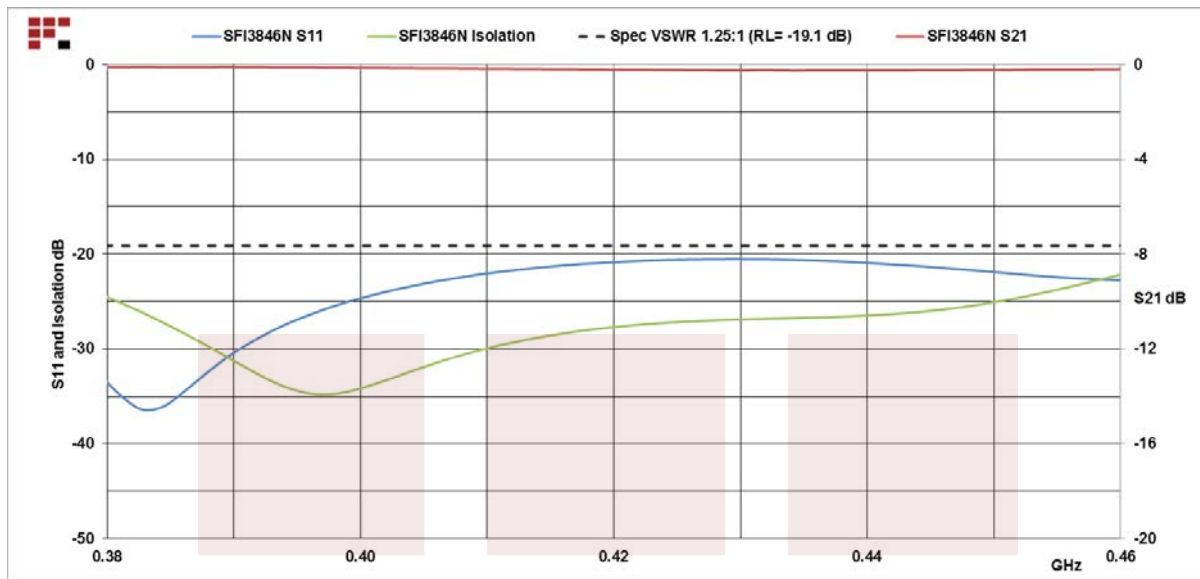
- High Power
- 380 to 460 MHz Frequency Range
- Max Forward Power 100 Watts CW
- Max Reverse Power 30 Watts CW
- Insertion Loss < 0.35 dB
- VSWR < 1.25:1
- Isolation > 20 dB
- N Female Connectors

Applications:

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

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Typical Performance Data

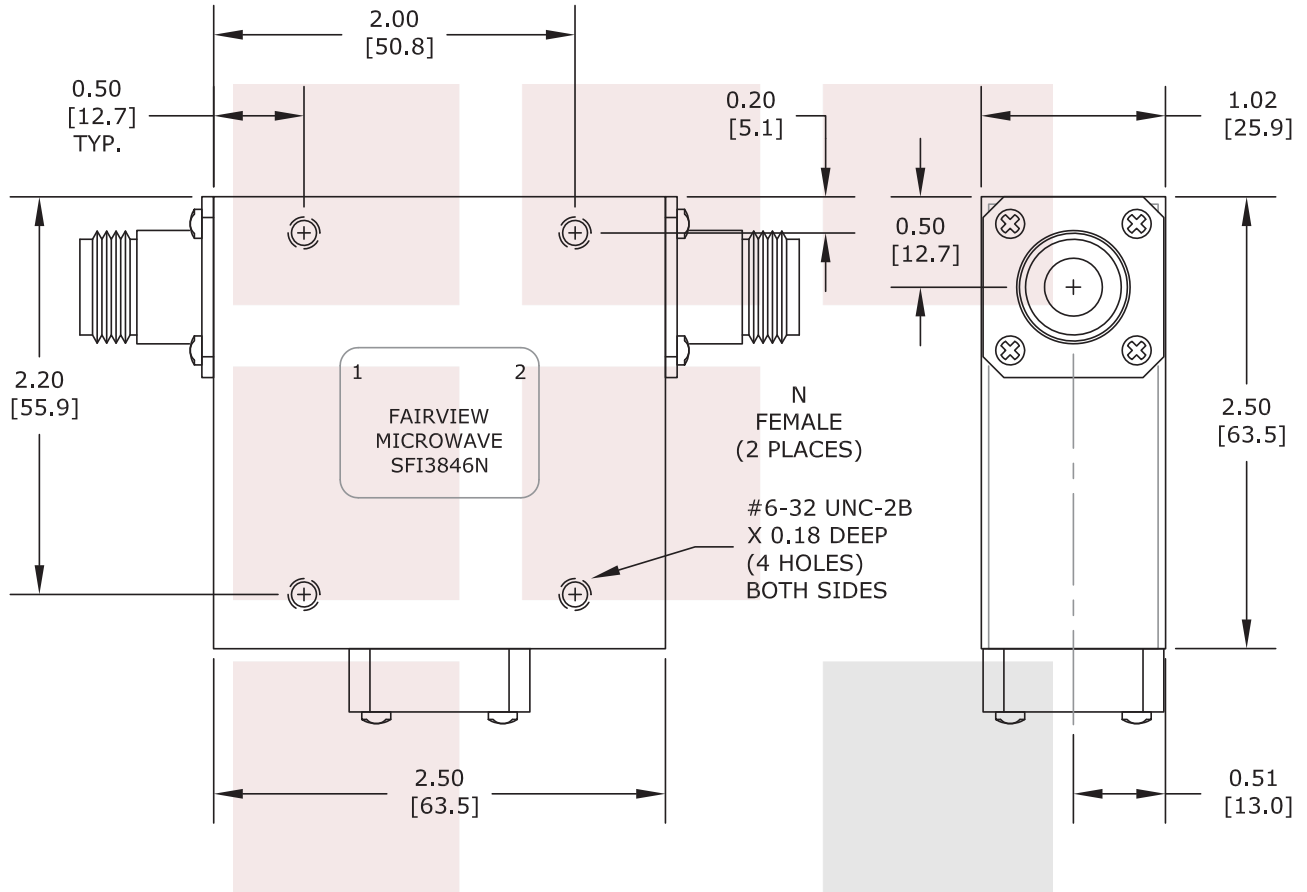


High Power Isolator N Female With 20 dB Isolation From 380 MHz to 460 MHz Rated to 100 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [High Power Isolator N Female With 20 dB Isolation From 380 MHz to 460 MHz Rated to 100 Watts SFI3846N](#)

URL: <https://www.fairviewmicrowave.com/n-isolator-20-db-isolation-380-460-mhz-1000-watts-sfi3846n-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].			
TITLE High Power Isolator N Female With 20 dB Isolation From 380 MHz to 460 MHz Rated to 100 Watts		DWG NO SFI3846N		CAGE CODE 3FKR5	
CAD FILE	080216	SHEET	SCALE	N/A	SIZE A 2233