

## 2.92mm Directional Coupler 20 dB 18 GHz to 40 GHz Rated to 30 Watts

The FM2CP1126-20 is an 20 dB RF coupler with 50 ohm 2.92mm connectors operating from 18 GHz to 40 GHz with a maximum input power of 30 Watts CW, and peak power handling of 300 watt. The FM2CP1126-20 has a coupling factor of 20 dB, insertion loss of 1 dB maximum and a maximum VSWR of 1.6: 1. The coupler operates over a temperature range of -45 to 85° C and meets environmental standard for humidity, shock, vibration, and altitude. Couplers have many Applications and perform several functions within the RF/Microwave industry such as circuit feedback and signal sampling for measurement or monitoring.



### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	18		40	GHz
Impedance		50		Ohms
Coupling	19	20	21	dB
Freq. Sensitivity		±0.7	±1	dB
Insertion Loss		0.8	1	dB
Directivity	12	14		dB
Main Line VSWR		1.5:1	1.6:1	
Sec. Line VSWR		1.5:1	1.6:1	
Input Power (CW)			30	Watts
Input Power (Peak)			300	Watts

### Features:

- 18 GHz to 40 GHz
- 30 Watts CW Max Power
- 20 dB Coupling Value
- Directional 2.92mm Coupler
- Meets Standards for Humidity, Shock, Vibration, Altitude

### Applications:

- Communications Systems
- GSM, LTE, 5G
- Amplifier Systems
- Point-to-Point Radio
- Automotive Radar
- Defense Applications
- Wireless Telecommunications

### Mechanical Specifications

Weight 0.143 lbs [64.86 g]  
Housing Material and Plating Aluminum

#### Configuration

Package Type Connectorized  
Input Connector 2.92mm Female  
Output Connector 2.92mm Female  
Coupled Connectors 2.92mm Female

### Environmental Specifications

#### Temperature

Operating Range -45 to +85 deg C  
Storage Range -55 to +125 deg C

Humidity 100% RH at 35°C, 95% RH at 40°C  
Shock 20G for 11msec half sine wave, 3 axis both directions

Vibration 25g RMS (15 degrees 2KHz) endurance, 1 hour per axis

Altitude 30,000 ft. (Epoxy Sealed Controlled environment)

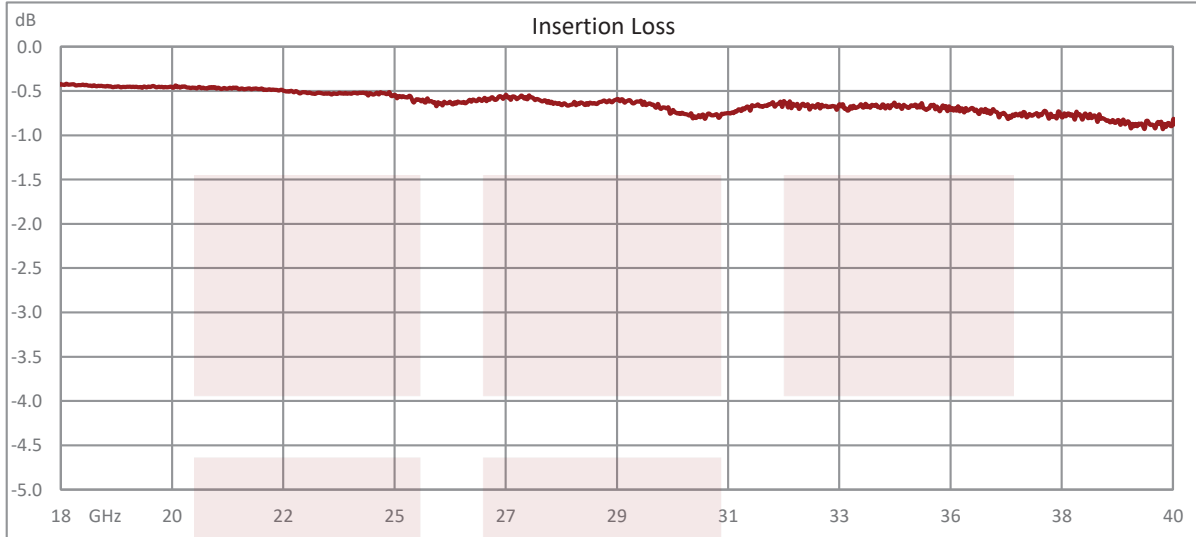
Fairview Microwave  
301 Leora Ln., Suite 100  
Lewisville, TX 75056  
Tel: 1-800-715-4396 / (972) 649-6678  
Fax: (972) 649-6689  
www.fairviewmicrowave.com  
sales@fairviewmicrowave.com

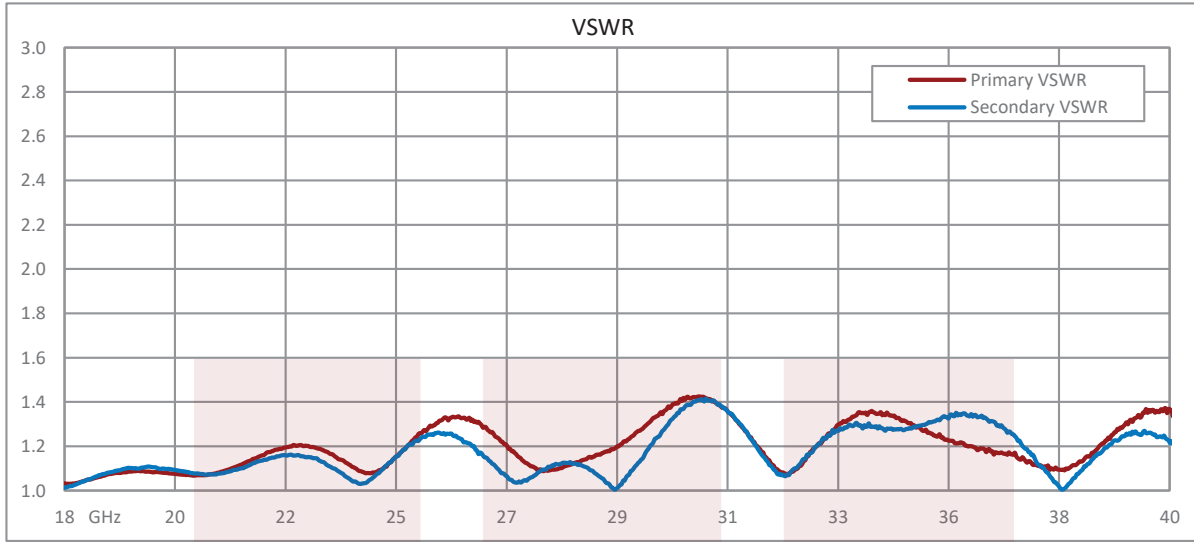
**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

**Typical Performance Data**





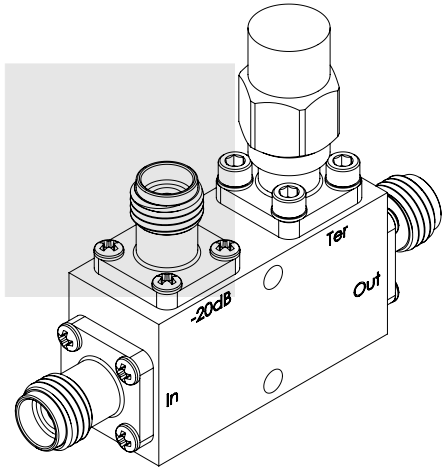
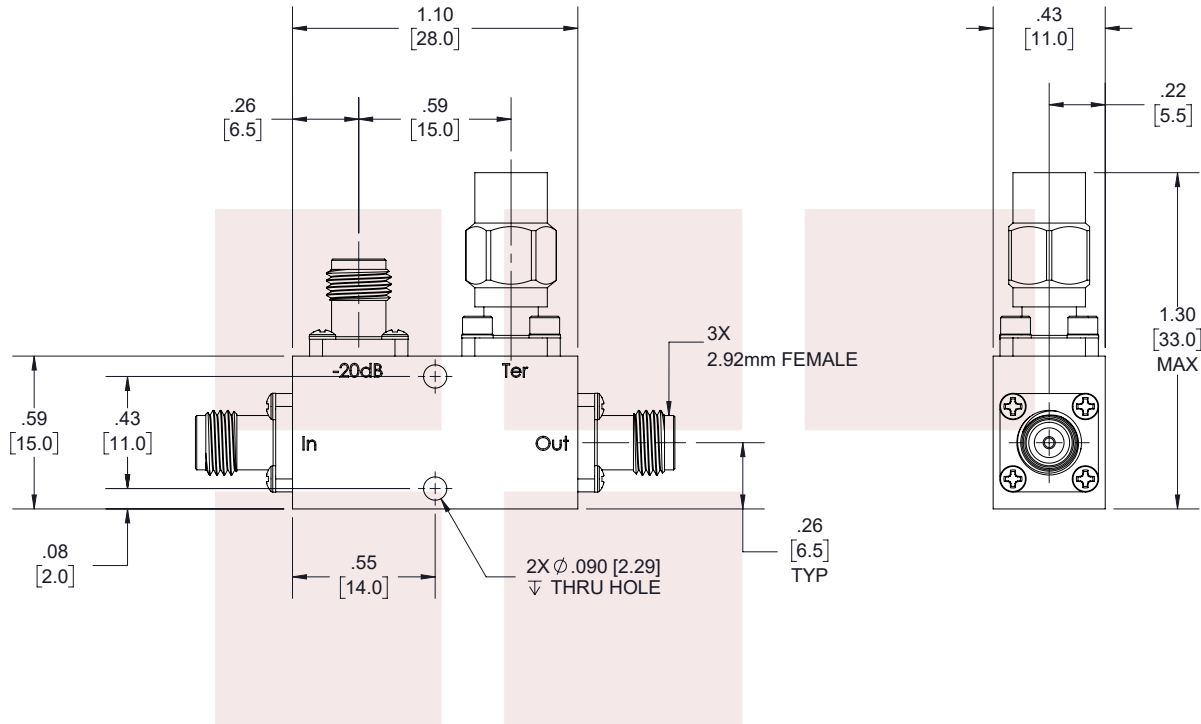
2.92mm Directional Coupler 20 dB 18 GHz to 40 GHz Rated to 30 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [2.92mm Directional Coupler 20 dB 18 GHz to 40 GHz Rated to 30 Watts FM2CP1126-20](https://www.fairviewmicrowave.com/2.92mm-directional-standard-20-db-40-ghz-fm2cp1126-20-p.aspx)

URL: <https://www.fairviewmicrowave.com/2.92mm-directional-standard-20-db-40-ghz-fm2cp1126-20-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
C	PCR FM2CP1126-20	8/11/2021	S.PONG



**LABEL**

FAIRVIEW MICROWAVE  
FM2CP1126-20  
D/C: YYWW

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.



TITLE  
2.92mm Directional Coupler 20 dB 18 GHz to 40 GHz  
Rated to 30 Watts

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES: CABLE LENGTH (L) TOLERANCES:

.X = ±.2 [5.08]	FRACTIONS	L ≤ 12 [305] = +1 [25] / -0
.XX = ±.02 [.51]	± 1/32	12 [305] < L ≤ 60 [1524] = +2 [51] / -0
.XXX = ±.005 [.13]	ANGLES ± 1°	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
		300 [7620] < L = +5%L / -0

THIRD-ANGLE PROJECTION



THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.

SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	ITEM NO. FM2CP1126-20	REV C
-----------	--------------------	--------------------	--------------------------	----------

T-Rev.D