

SMA Directional Coupler 20 dB 6 GHz to 26.6 GHz Rated to 30 Watts

The FM2CP1120-20 is an 20 dB RF coupler with 50 ohm SMA connectors operating from 6 GHz to 26.6 GHz with a maximum input power of 30 Watts CW, and peak power handling of 300 watt. The FM2CP1120-20 has a coupling factor of 20 dB, insertion loss of 1 dB maximum and a maximum VSWR of 1.5:1. 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	6		26.6	GHz
Impedance		50		Ohms
Coupling		20		dB
Freq. Sensitivity			±1	dB
Insertion Loss			1	dB
Directivity	13			dB
Main Line VSWR			1.5:1	
Sec. Line VSWR			1.5:1	
Input Power (CW)			30	Watts
Input Power (Peak)			300	Watts

Mechanical Specifications

Weight	0.98 lbs [444.52 g]
Housing Material and Plating	Aluminum

Configuration

Package Type	Connectorized
Input Connector	SMA Female
Output Connector	SMA Female
Coupled Connectors	SMA 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)



Features:

- 6 GHz to 26.6 GHz
- 30 Watts CW Max Power
- 20 dB Coupling Value
- Directional SMA 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

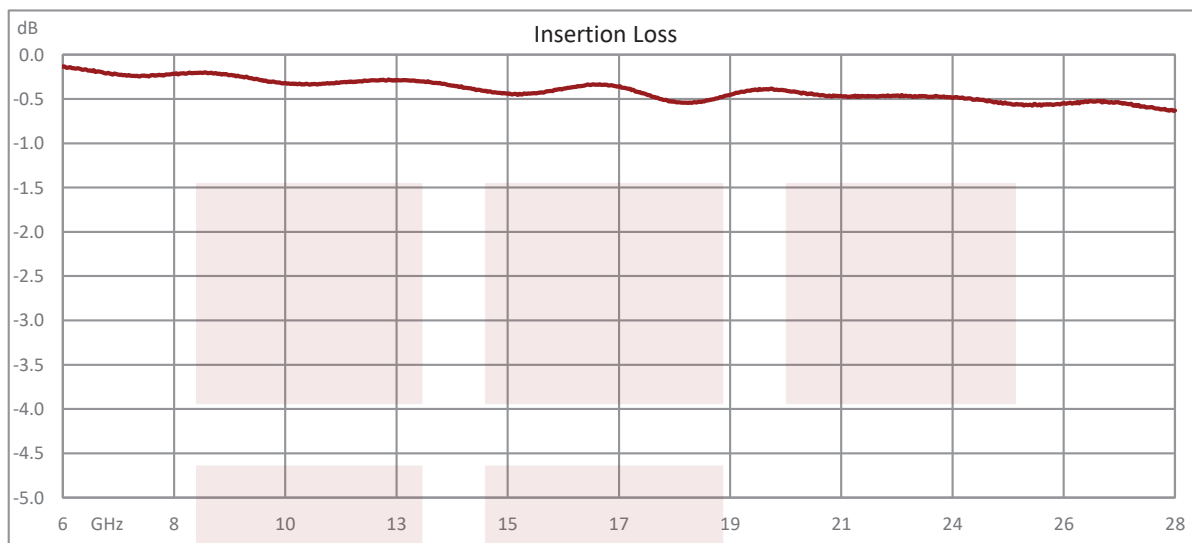
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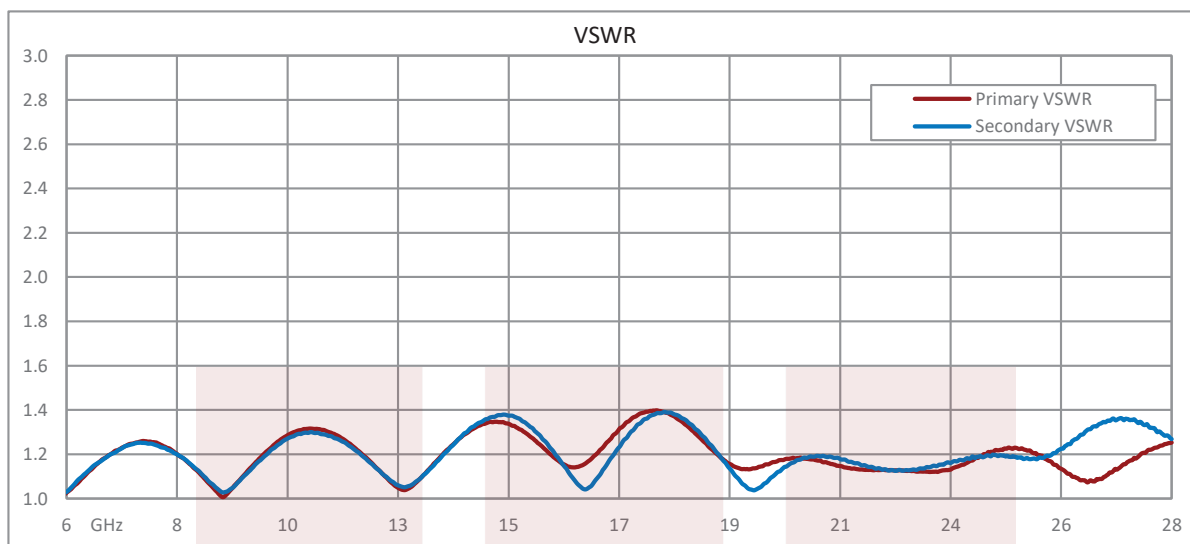
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Typical Performance Data





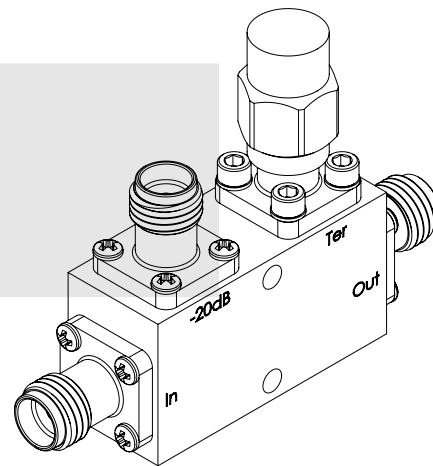
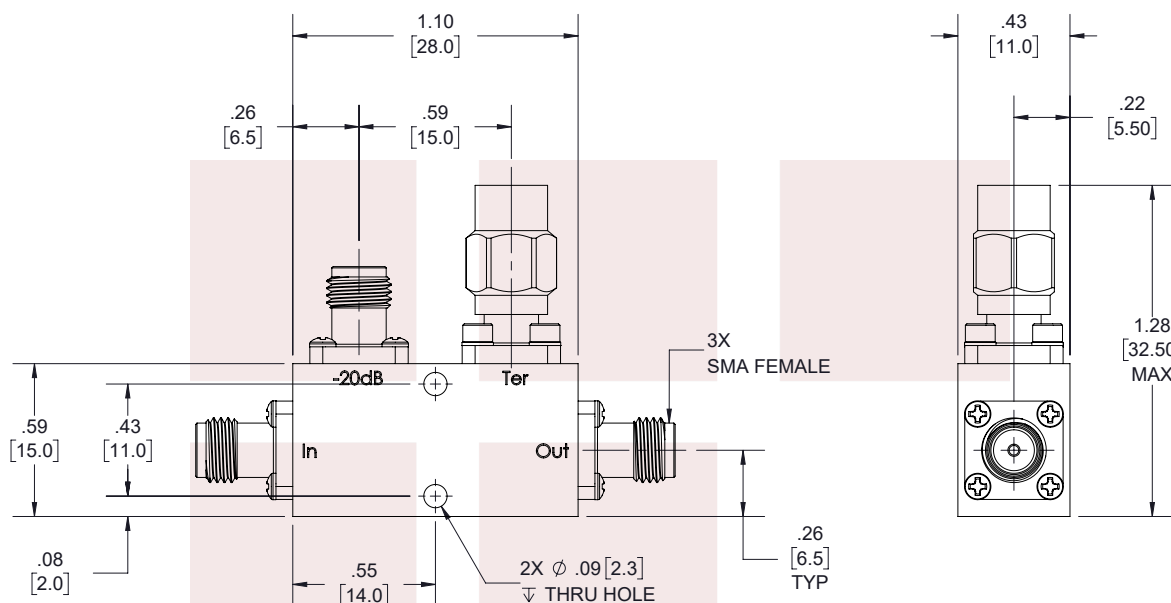
SMA Directional Coupler 20 dB 6 GHz to 26.6 GHz Rated to 30 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMA Directional Coupler 20 dB 6 GHz to 26.6 GHz Rated to 30 Watts FM2CP1120-20](https://www.fairviewmicrowave.com/sma-directional-standard-20-db-26.6-ghz-fm2cp1120-20-p.aspx)

URL: <https://www.fairviewmicrowave.com/sma-directional-standard-20-db-26.6-ghz-fm2cp1120-20-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
B	PCR PE2CP1120-X / FM2CP1120-X	12/18/2019	S.PONG



LABEL

FAIRVIEW MICROWAVE
FM2CP1120-20
D/C: YYWW

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TITLE

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Rated to 30 Watts

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

TOLERANCES:

.X = ±.2 [5.08] FRACTIONS
.XX = ±.02 [.51] ± 1/32
.XXX = ±.005 [.13] ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
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



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SHEET 1 OF 1

SCALE N/A

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	ITEM NO. FM2CP1120-20	REV B
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T-Rev.D