

## 2.92mm Directional Coupler 15 dB 8 GHz to 43.5 GHz Rated to 30 Watts

The FM2CP1125-15 is an 15 dB RF coupler with 50 ohm 2.92mm connectors operating from 8 GHz to 43.5 GHz with a maximum input power of 30 Watts CW, and peak power handling of 500 watt. The FM2CP1125-15 has a coupling factor of 15 dB, insertion loss of 1.5 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	8		43.5	GHz
Impedance		50		Ohms
Coupling	14	15	16	dB
Freq. Sensitivity		±0.3	±0.7	dB
Insertion Loss		1.1	1.5	dB
Main Line VSWR		1.4:1	1.6:1	
Sec. Line VSWR		1.4:1	1.6:1	
Input Power (CW)			30	Watts
Input Power (Peak)			500	Watts

### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	8 to 20	20 to 40	40 to 43.5			GHz
Insertion Loss, Typ	0.7	1.1	1.3			dB
Main Line VSWR, Typ	1.3:1	1.4:1	1.5:1			
Main Line VSWR, Max	1.5:1	1.6:1				
Sec. Line VSWR, Typ	1.3:1	1.4:1	1.5:1			
Sec. Line VSWR, Max	1.5:1	1.6:1				
Directivity, Min	14	10	12			dB
Directivity, Typ	18	14				dB
Coupling, Typ	15	15	15			dB
Freq. Sensitivity, Typ	±0.4	±0.3	±0.3			dB

### Mechanical Specifications

Weight	0.0585 lbs [26.54 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



### Features:

- 8 GHz to 43.5 GHz
- 30 Watts CW Max Power
- 15 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

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](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

## Environmental Specifications

### Temperature

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

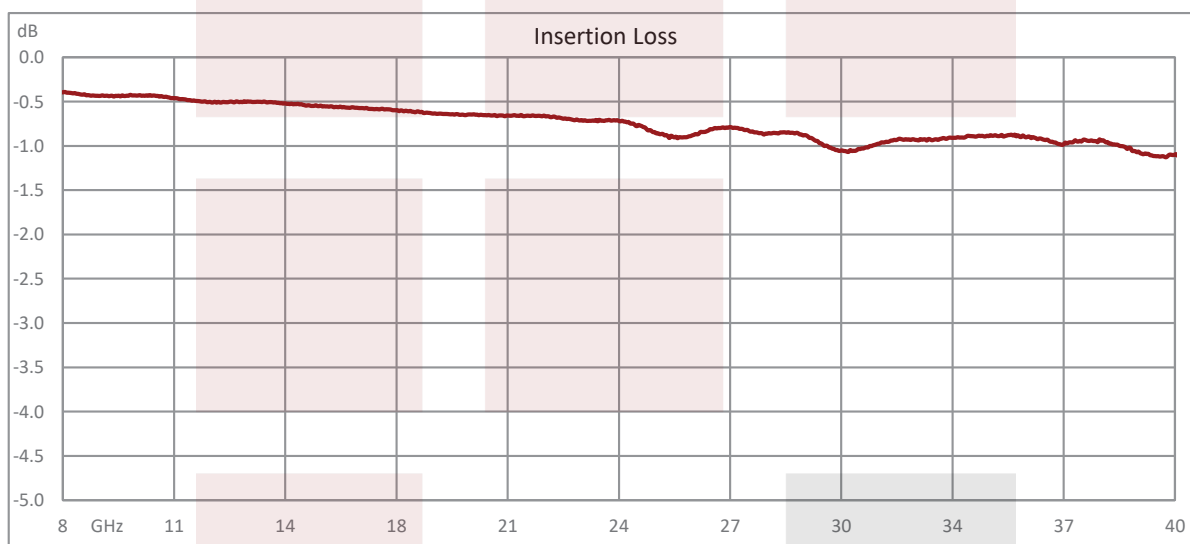
Humidity 100% RH at 35°C, 95% RH at 40°C  
Shock 20G for 11msec half sine wave, 3 axis both directions  
Vibration 25g RMS (15 degrees 2KHz) endurance, 1 hour per axis  
Altitude 30,000 ft. (Epoxy Sealed Controlled environment)

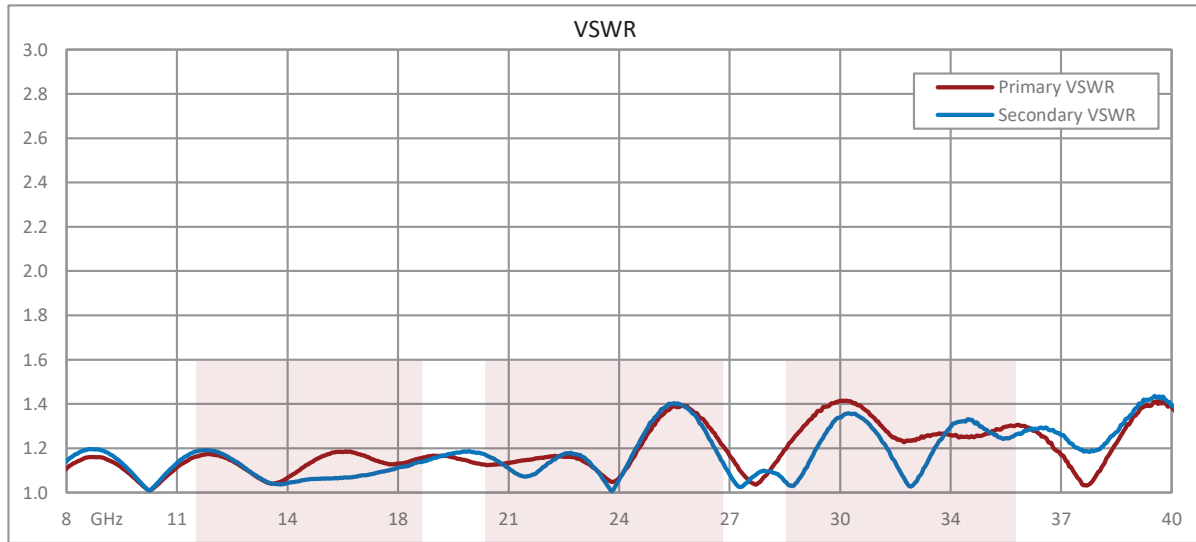
## Compliance Certifications (see [product page](#) for current document)

## Plotted and Other Data

Notes:

### Typical Performance Data





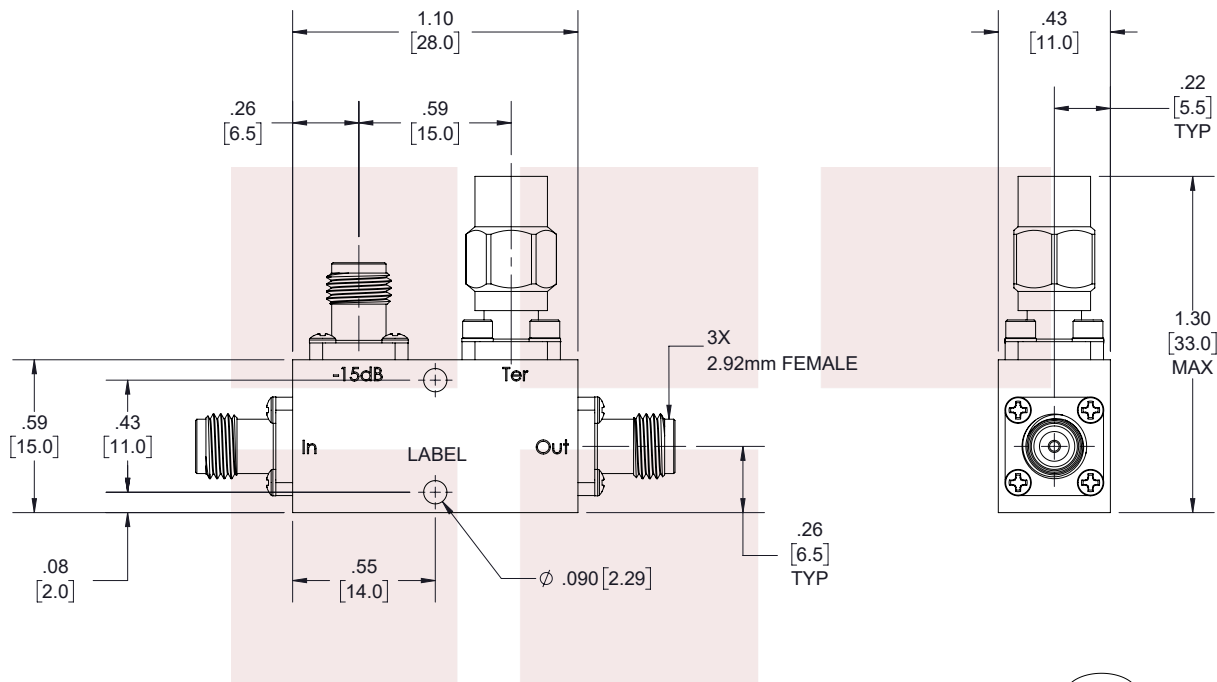
2.92mm Directional Coupler 15 dB 8 GHz to 43.5 GHz Rated to 30 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [2.92mm Directional Coupler 15 dB 8 GHz to 43.5 GHz Rated to 30 Watts FM2CP1125-15](https://www.fairviewmicrowave.com/2.92mm-directional-standard-15-db-43.5-ghz-fm2cp1125-15-p.aspx)

URL: <https://www.fairviewmicrowave.com/2.92mm-directional-standard-15-db-43.5-ghz-fm2cp1125-15-p.aspx>

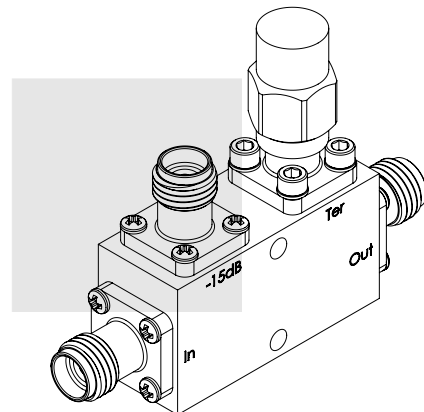
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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
B	PCR FM2CP1125-15	8/11/2021	S.PONG



LABEL

FAIRVIEW MICROWAVE  
FM2CP1125-15  
D/C: YYWW



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

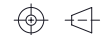
TOLERANCES:

.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	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	3FKR5	K.DANG	FM2CP1125-15	B

T-Rev.D