

## N Low PIM Directional Coupler 6 dB Coupled Port From 380 MHz To 4 GHz Rated to 200 Watts

The FMCP1057A is a 6 dB direction coupler with N Female connectors rated to 200 watts. Insertion loss is a low 0.3 dB. The total path loss (including accuracy, frequency variations, dissipative loss and theoretical loss due to coupling) is 1.5 dB.

Fairview Microwave's family of Low PIM couplers are tapered designs that cover the 380 to 4,000 MHz frequency range. Offered in a broad range of coupling values to allow flexibility in the design of your low PIM system: 6, 10, 15, 20, and 30 dB. Especially designed and manufactured for the rigors of low PIM systems, this family of couplers is rated at an average power of 200 watts, and have PIM performance of -155 dBc or better. They can be used indoor or outdoor as they meet the moisture requirements of IP67. If higher power is needed please consider Fairview Microwave's unequal tappers. All couplers are available in four different connector types: N, DIN 7-16, MiniDIN 4.3-10, and MiniDIN 4.1-9.5.

### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	0.38		4	GHz
Impedance		50		Ohms
Coupling		6 ±1		dB
Freq. Sensitivity		±0.4		dB
Main Line Loss			1.5	dB
Insertion Loss			0.3	dB
Directivity	17			dB
Main Line VSWR			1.22:1	
Sec. Line VSWR			1.29:1	
Passive Intermodulation 2x20W			-155	dBc
Input Power (CW)			200	Watts

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

### Mechanical Specifications

#### Size

Length	5.93 in [150.62 mm]
Width/Dia.	1 in [25.4 mm]
Height	2.4 in [60.96 mm]
Weight	1.725 lbs [782.45 g]
Housing Material and Plating	Aluminum, Brass

#### Configuration

Package Type	Connectorized
Input Connector	N Female
Output Connector	N Female
Coupled Connectors	N Female



### Features:

- Low PIM (-155 dBc)
- 200 Watt Rating
- 380 – 4,000 MHz
- 6 dB Coupling Factor
- VSWR 1.29 Maximum
- N Female Connector

### Applications:

- Indoor/Outdoor Use (IP67)
- Base Station
- 4G/AWS/PCS
- Low PIM
- Distributed Antenna Systems (DAS)
- Wireless Infrastructure

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**Environmental Specifications**

**Temperature**

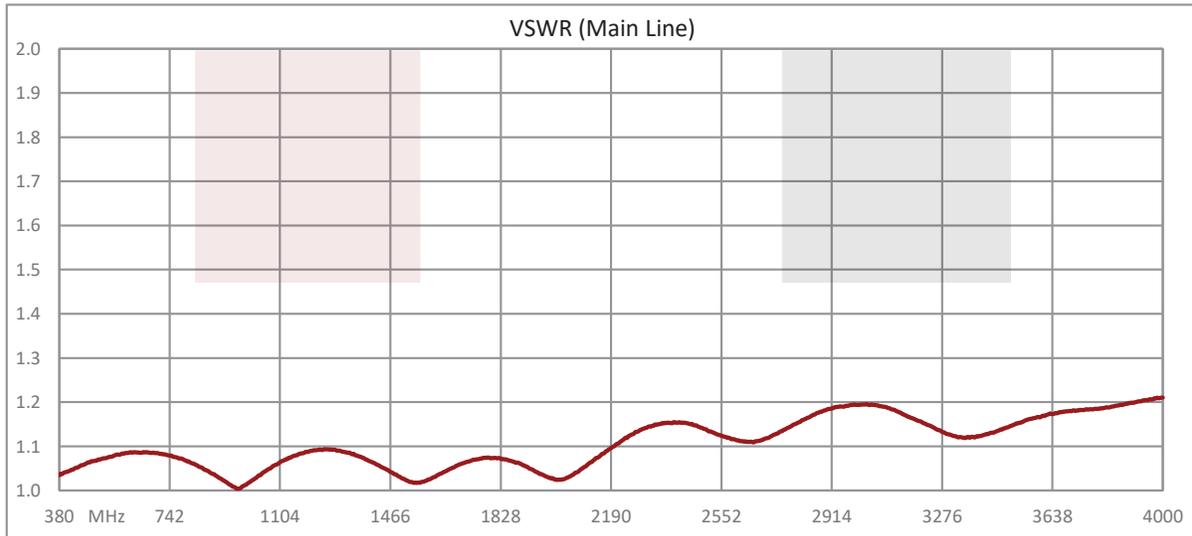
Operating Range -20 to +55 deg C  
 Ingress Protection (IP) Rating IP67

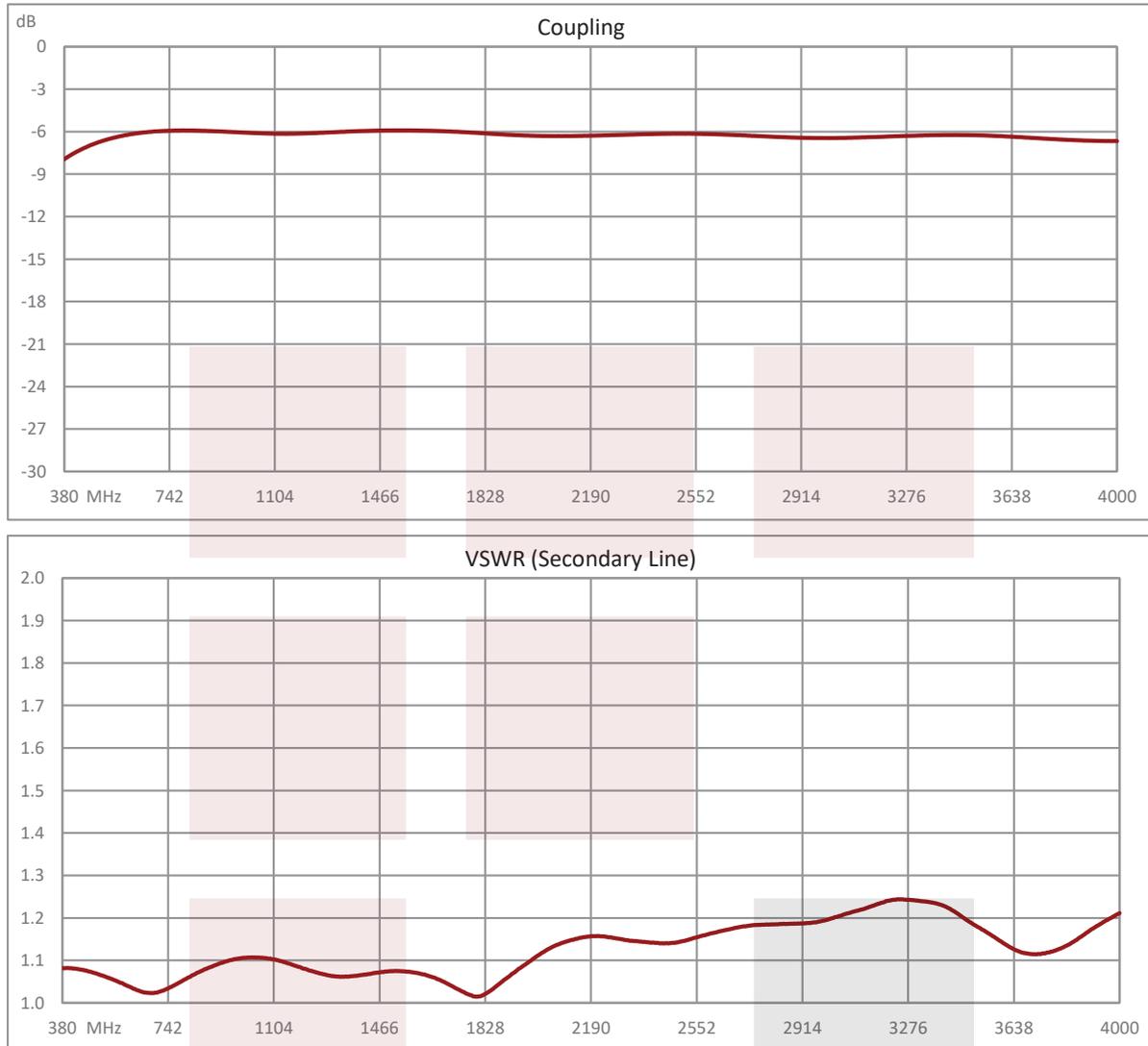
**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

**Typical Performance Data**





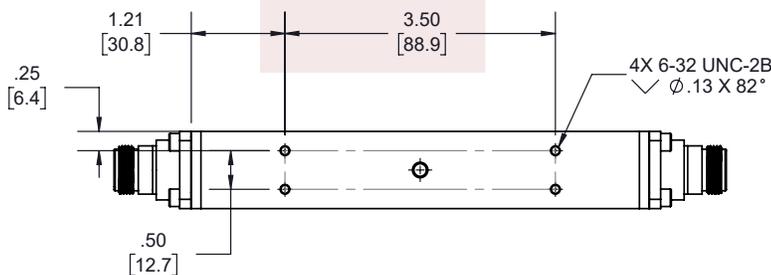
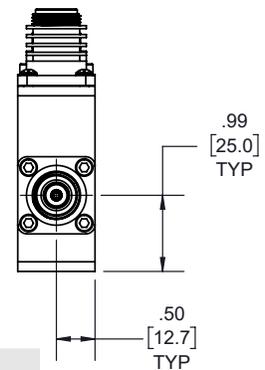
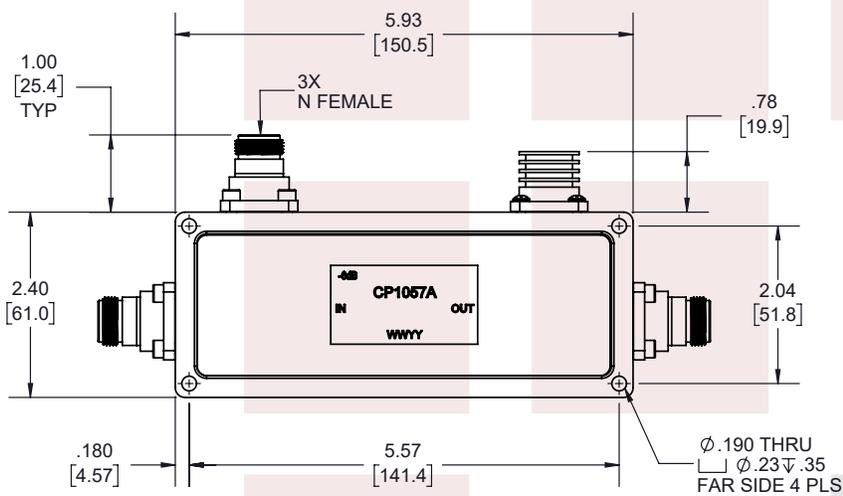
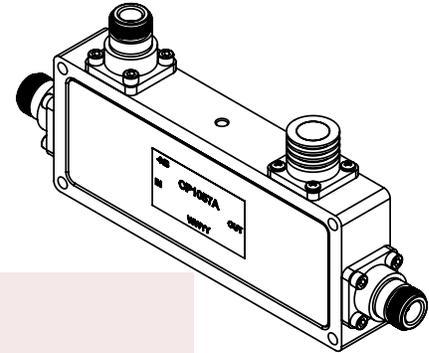
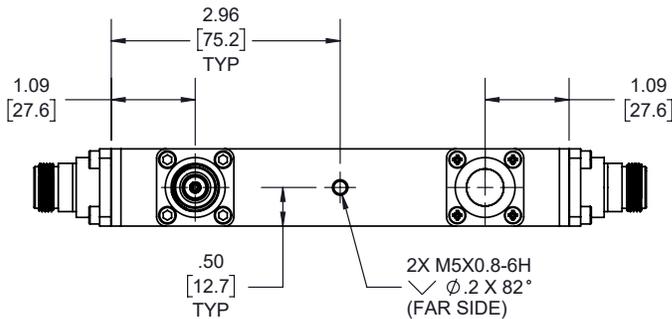
N Low PIM Directional Coupler 6 dB Coupled Port From 380 MHz To 4 GHz Rated to 200 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [N Low PIM Directional Coupler 6 dB Coupled Port From 380 MHz To 4 GHz Rated to 200 Watts FMCP1057A](#)

URL:

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
A	INITIAL RELEASE	10/13/2022	S. PONG



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TITLE  
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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



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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. FMCP1057A	REV A
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