



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

### Couplers Technical Data Sheet

**PE2CP1057A**

#### 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

#### Description

The PE2CP1057A 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.

Pasternack'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 Pasternack'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                      | Minimum | Typical | Maximum | Units |
|----------------------------------|---------|---------|---------|-------|
| Frequency Range                  | 0.38    |         | 4       | GHz   |
| Impedance                        |         | 50      |         | Ohms  |
| Coupling                         |         | 6 ±1    |         | dB    |
| Frequency Sensitivity            |         | ±0.4    |         | dB    |
| Main Line Loss                   |         |         | 1.5     | dB    |
| Insertion Loss                   |         |         | 0.3     | dB    |
| Directivity                      | 17      |         |         | dB    |
| Main Line VSWR                   |         |         | 1.22:1  |       |
| Secondary Line VSWR              |         |         | 1.29:1  |       |
| Passive Intermodulation<br>2x20W |         |         | -155    | dBc   |
| Input Power (CW)                 |         |         | 200     | Watts |

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

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low PIM Directional 6 dB N Coupler From 380 MHz to 4 GHz Rated to 200 Watts PE2CP1057A](#)



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#### 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      |

#### Environmental Specifications

##### Temperature

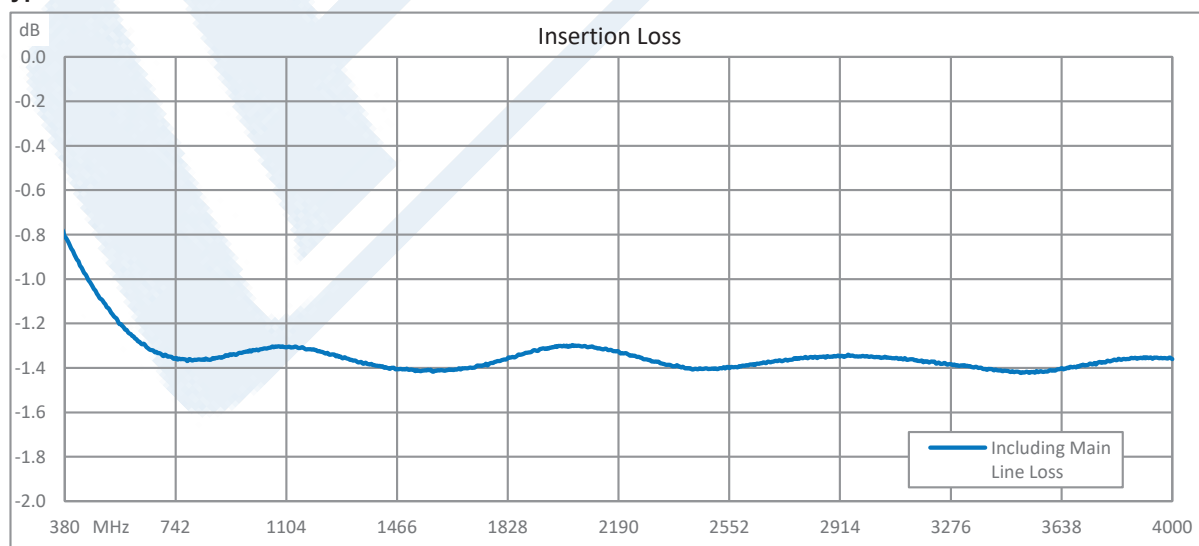
|                                |                  |
|--------------------------------|------------------|
| Operating Range                | -20 to +55 deg C |
| Ingress Protection (IP) Rating | IP67             |

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

#### Plotted and Other Data

Notes:

#### Typical Performance Data



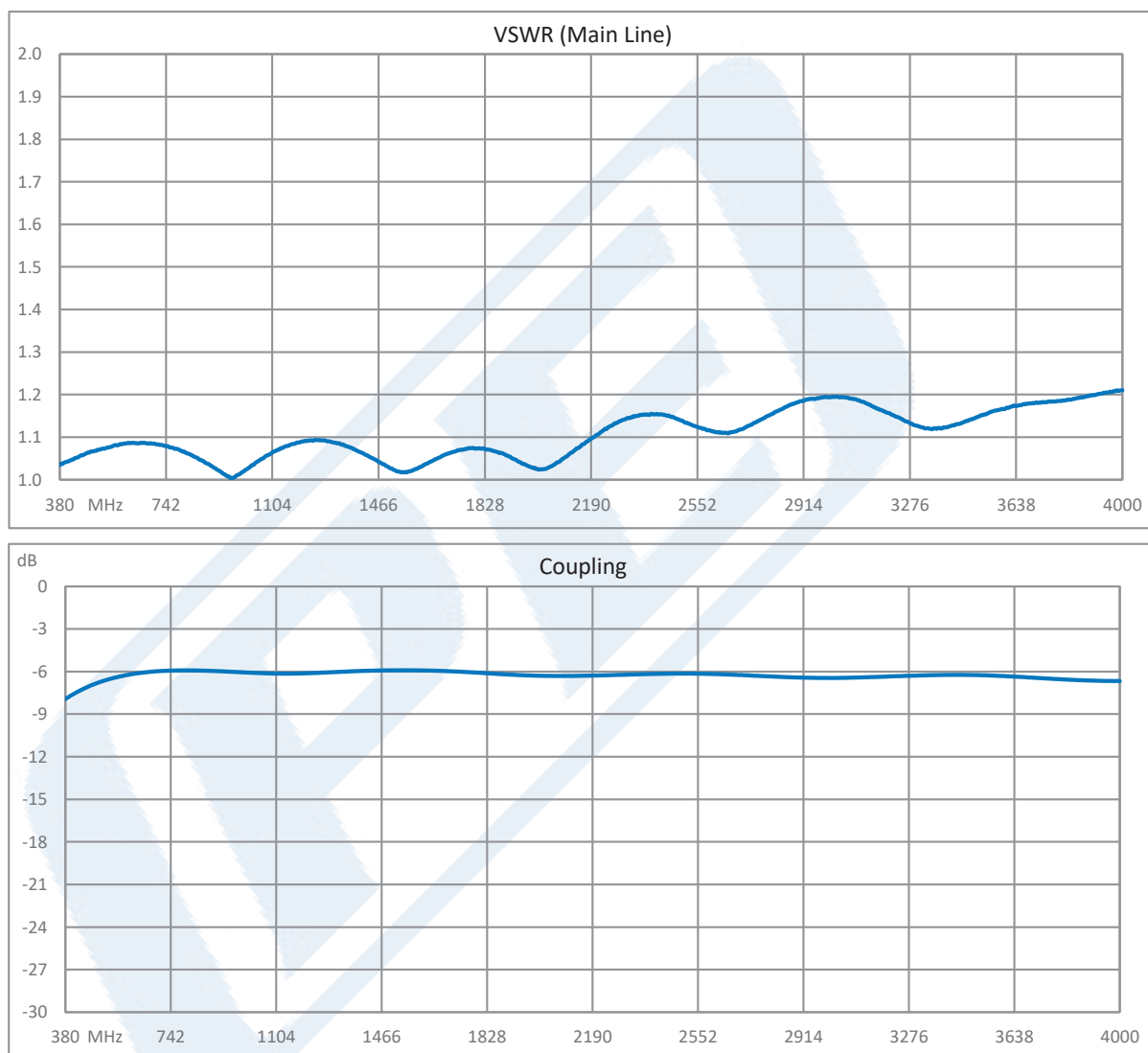
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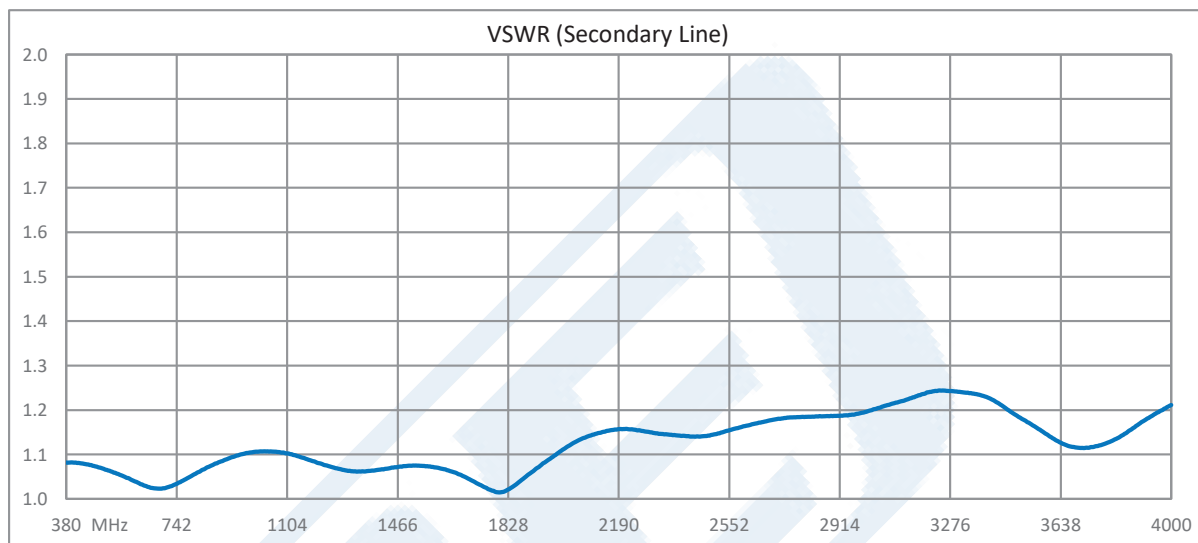
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Low PIM Directional 6 dB N Coupler From 380 MHz to 4 GHz Rated to 200 Watts from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low PIM Directional 6 dB N Coupler From 380 MHz to 4 GHz Rated to 200 Watts PE2CP1057A](https://www.pasternack.com/directional-6-db-n-coupler-698-mhz-2.7-ghz-200-watts-pe2cp1057a-p.aspx)

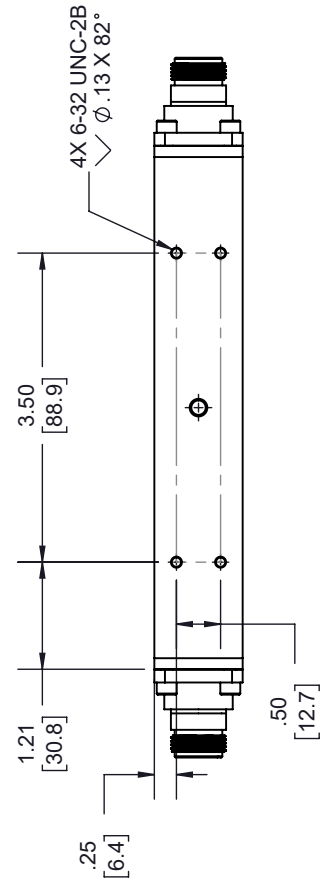
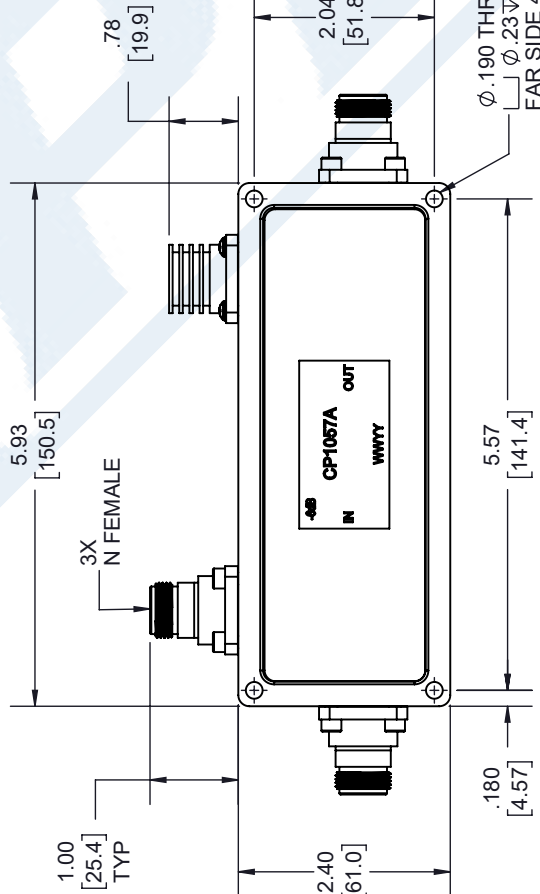
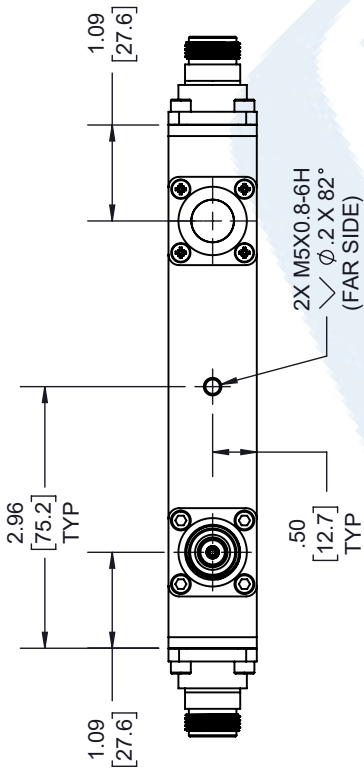
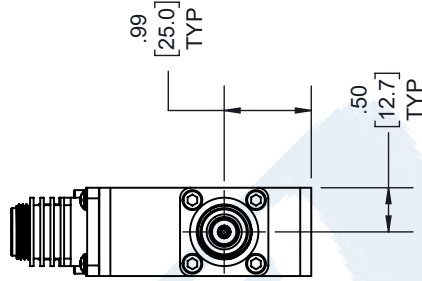
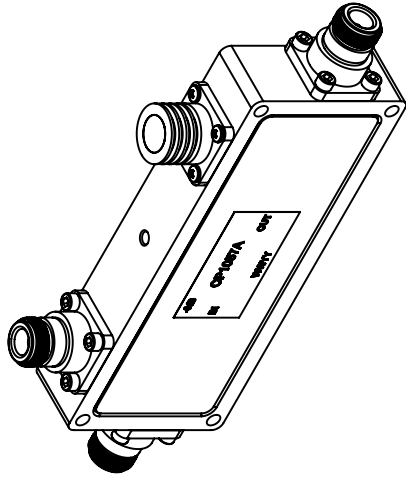
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# PE2CP1057A CAD Drawing

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

| REVISIONS |                 |            |          |
|-----------|-----------------|------------|----------|
| REV.      | DESCRIPTION     | DATE       | APPROVED |
| A         | INITIAL RELEASE | 10/13/2022 | S. PONG  |



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% / -0

ALL DIMENSIONS SHOWN  
ARE FOR REFERENCE ONLY.

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SHEET 1 OF 1  
SCALE N/A  
REV A

SIZE A CAGE CODE 53919 DRAWN BY K.DANG ITEM NO. PE2CP1057A