



Low PIM Directional 30 dB 7/16 DIN Coupler To 4 GHz Rated to 200 Watts

Couplers Technical Data Sheet

PE2CP1074

Features

- Low PIM (-155 dBc)
- 200 Watt Rating
- 380 – 4,000 MHz
- 30 dB Coupling Factor
- VSWR 1.22 Maximum
- 7/16 DIN Female Connector

Applications

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

Description

The PE2CP1074 is a 30 dB direction coupler with 7/16 DIN Female connectors rated to 200 watts. Insertion loss is a low 0.25 dB. The total path loss (including accuracy, frequency variations, dissipative loss and theoretical loss due to coupling) is 0.27 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 | | 30 ±1.5 | | dB |
| Frequency Sensitivity | | | ±0.6 | dB |
| Main Line Loss | | | 0.27 | dB |
| Insertion Loss | | | 0.25 | dB |
| Directivity | 17 | | | dB |
| Main Line VSWR | | | 1.22:1 | |
| Secondary Line VSWR | | | 1.29:1 | |
| Passive Intermodulation 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 30 dB 7/16 DIN Coupler To 4 GHz Rated to 200 Watts PE2CP1074](#)



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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 | 1.874 lbs [850.03 g] |

Configuration

| | |
|--------------------|-----------------|
| Package Type | Connectorized |
| Input Connector | 7/16 DIN Female |
| Output Connector | 7/16 DIN Female |
| Coupled Connectors | 7/16 DIN Female |

Environmental Specifications

Temperature

| | |
|-----------------|------------------|
| Operating Range | -20 to +55 deg C |
|-----------------|------------------|

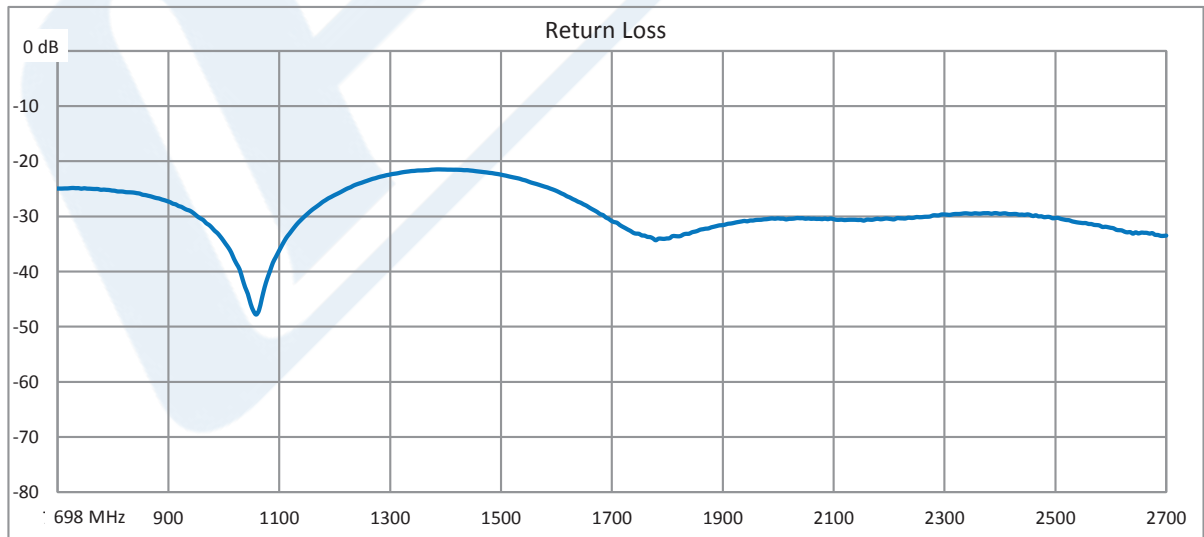
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

Typical Performance Data



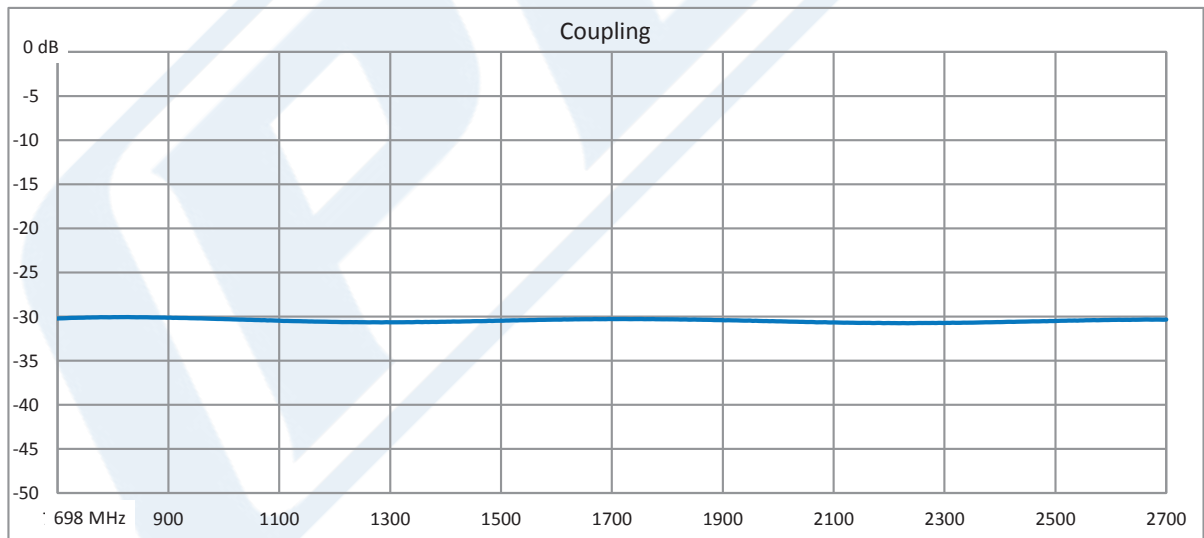
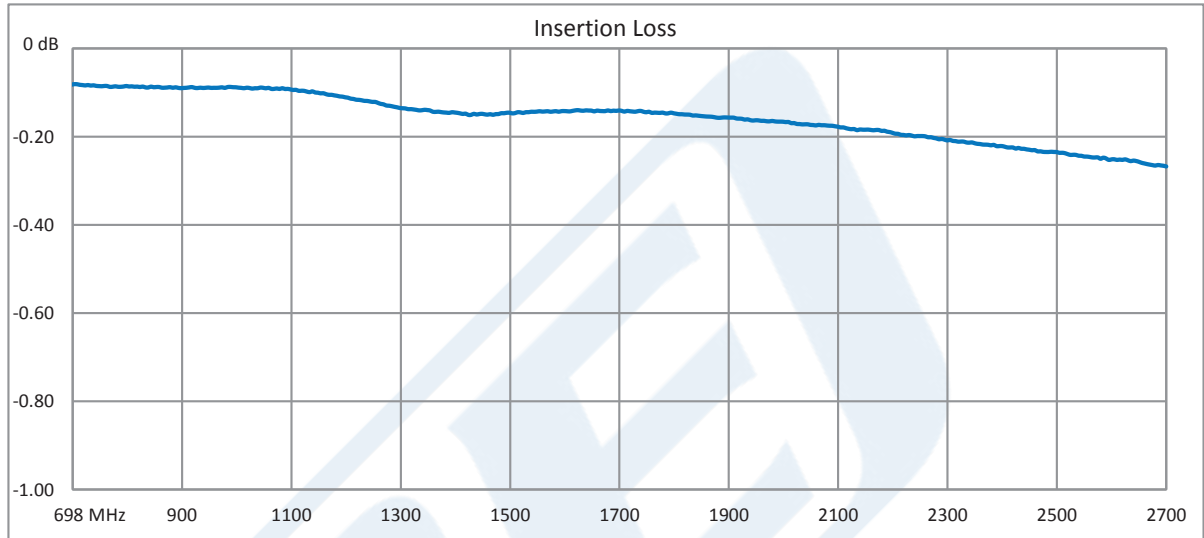
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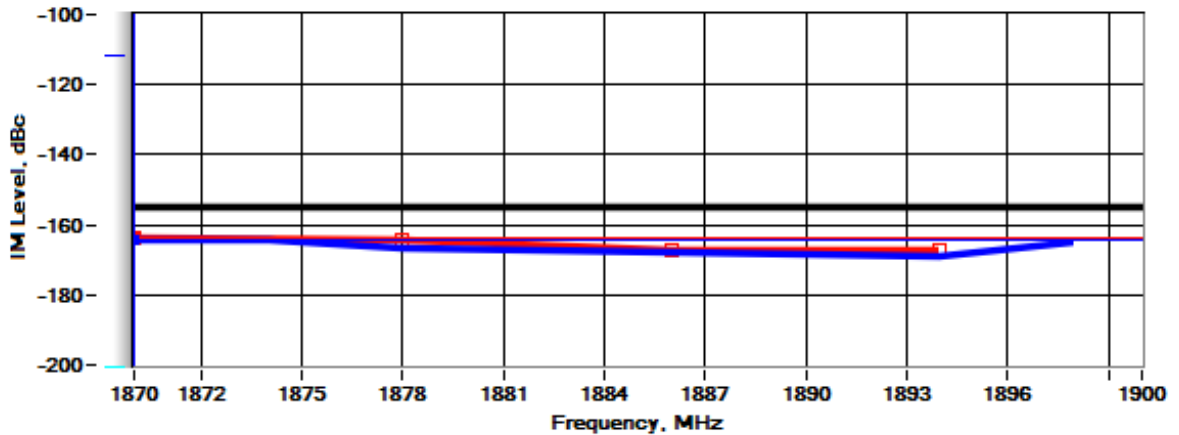
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F2 Down — F1=1930.0 MHz, F2=1990.0 MHz; IM3=-164.2 dBc at 1870.0
F1 Up — F1=1930.0 MHz, F2=1990.0 MHz; IM3=-164.0 dBc at 1870.0

Passive IM Response



Low PIM Directional 30 dB 7/16 DIN Coupler 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.

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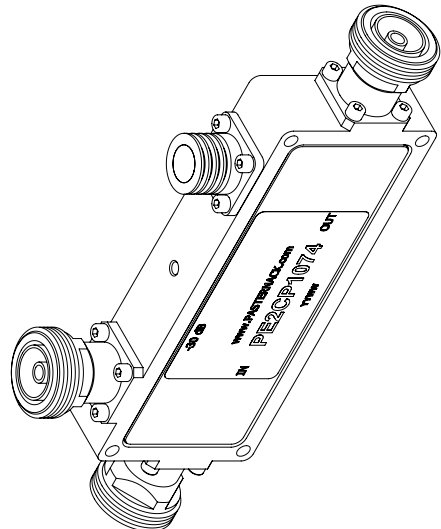
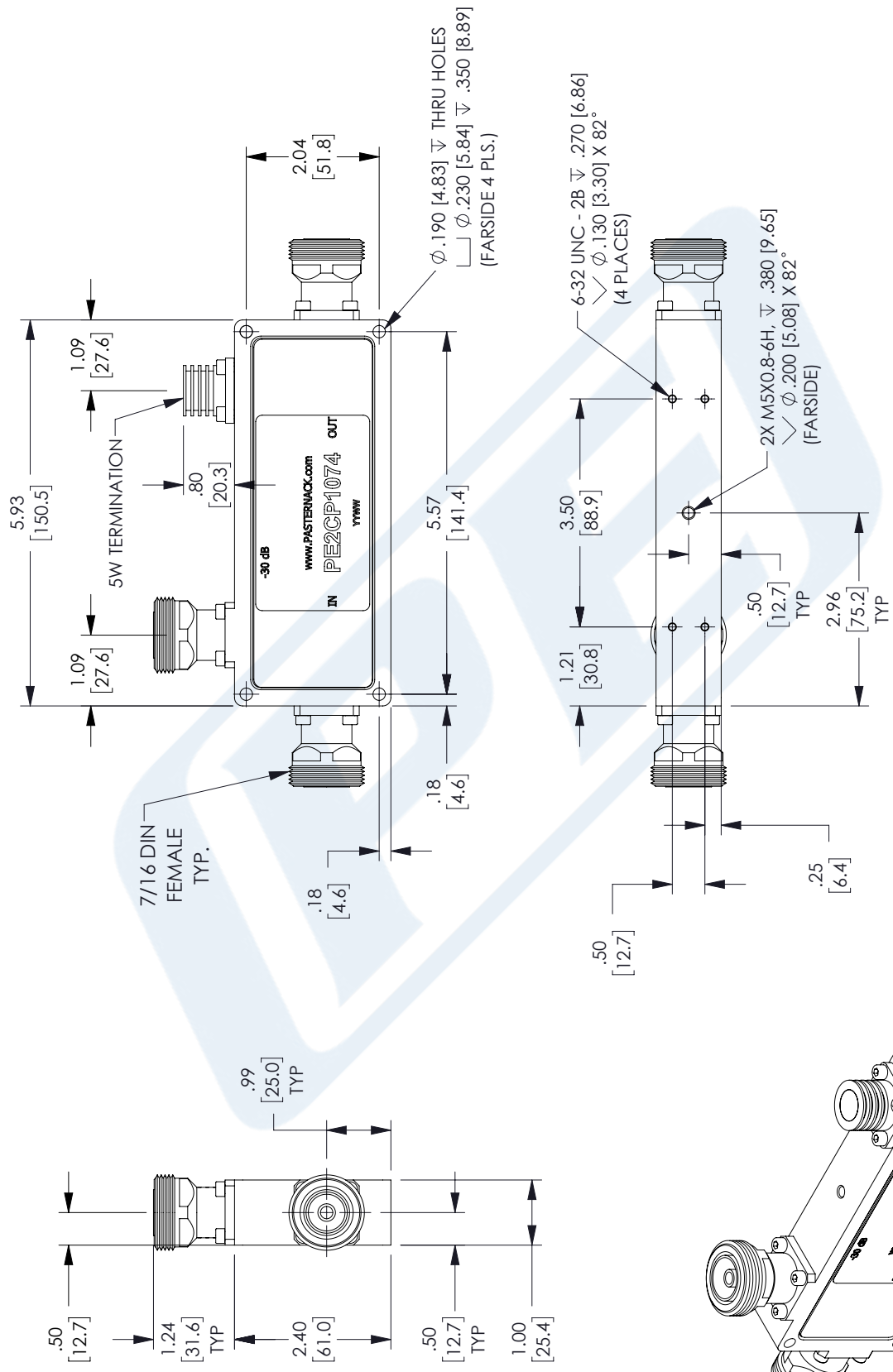
URL: <https://www.pasternack.com/directional-30-db-7-16-din-coupler-380-mhz-4-ghz-200-watts-pe2cp1074-p.aspx>

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. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

PE2CP1074 CAD Drawing

Low PIM Directional 30 dB 7/16 DIN Coupler To 4 GHz Rated to 200 Watts

| REVISIONS | | | |
|-----------|---------------------------------|-----------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| B | PCR FMCPC1074 PE2CP1074 2022062 | 6/29/2022 | SPONG |



THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

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an INFINIT brand

Pasternack Enterprises, Inc.
P. O. Box 16759, Irvine, CA 92623.
Phone: 1.949.261.1920 | 1.866.727.8376
Fax: 1.949.261.7451
Website: www.pasternack.com
E-mail: sales@pasternack.com

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 | |

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SIZE [CAGE CODE] DRAWN BY

A 53919 KGLEBOVA

ITEM NO.

PE2CP1074