

# Powertec RF Directional Coupler, 20 dB, 698-3800 MHz, 4.3-10 Female, -155 dBc

SKU: IBC-PT-00027

MPN: PCM-DC20-6940.432

Barcode: 9337692001642

## Description

The Powertec RF Directional Coupler (SKU: IBC-PT-00027), part number PCM-DC20-6940.432, is designed for efficient RF signal management in the frequency range of 698 to 3800 MHz. With a coupling value of 20 dB, this coupler ensures reliable performance in various wireless communication applications. Its compact dimensions are 129x23.5x48 mm, making it suitable for space-constrained installations.

Featuring an IP65 ingress protection rating, the coupler is built to withstand challenging environments, operating effectively between -25 °C and 75 °C. The 4.3-10 Female connectors on the input, output, and coupled ports provide robust connectivity. Its electrical performance includes a 3rd Order PIM rating of -155 dBc and an input impedance of 50 Ω.

The coupler demonstrates a VSWR of less than 1.3:1, an Insertion Loss of 0.40 dB, and Inter-Port Isolation greater than 33 dB, ensuring minimal signal degradation and high isolation between ports.

Man...

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## Powertec

Powertec is a wireless technology manufacturer and systems integrator based in Australia. Operating since 1995, Powertec has grown to become the leading wireless technology distributor in its region, and a leading Infratech systems developer. Supporting over 1500 partners the company provides procurement, design, project management, and support services across Australia, New Zealand, Pacific ...

# RF Specification

|                   |          |                   |          |
|-------------------|----------|-------------------|----------|
| Min. Frequency:   | 698 MHz  | Input Impedance:  | 50       |
| Max. Frequency:   | 3800 MHz | Max. Input Power: | 300 W    |
| Coupling / Split: | 20 dB    | PIM, 3rd Order:   | -155 dBc |

## Port Matrix

| Port Function | RF Interface  |
|---------------|---------------|
| Input         | 4.3-10 Female |
| Output        | 4.3-10 Female |
| Coupled       | 4.3-10 Female |

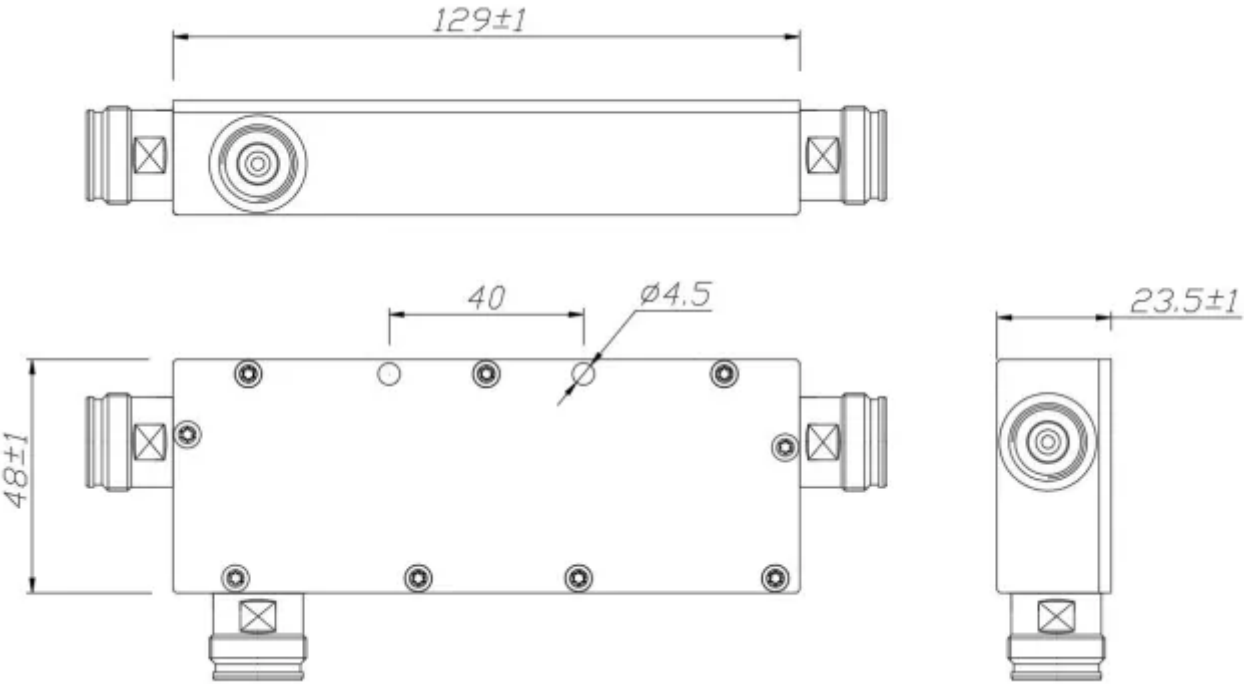
## Frequency Test Data

| Start Frequency | Stop Frequency | VSWR    | Insertion Loss | Inter-Port Iso. |
|-----------------|----------------|---------|----------------|-----------------|
| 698 MHz         | 3800 MHz       | < 1.3:1 | 0.4 dB         | > 33 dB         |

# Physical Specification

|                     |                     |                             |        |
|---------------------|---------------------|-----------------------------|--------|
| Input Ports:        | 1                   | Min. Operating Temperature: | -25 °C |
| Output Ports:       | 2                   | Max. Operating Temperature: | 75 °C  |
| Subtype:            | Directional Coupler |                             |        |
| Ingress Protection: | IP65                |                             |        |
| Dimensions:         | 129x23.5x48         |                             |        |
| Weight:             | 0.38 kg             |                             |        |

Drawing



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