

Powertec Wireless Technology ABN: 42 082 948 463 PO Box 1034, Ashmore City Queensland, Australia, 4214 sales@powertec.com.au 1300 769 378

# Powertec RF Directional Coupler, 6 dB, 698 to 3800 MHz, 4.3-10 Female, -155 dBc

SKU: IBC-PT-00055

MPN: PCM-DC6-6940.432 Barcode: 9337692001925

#### Description

The Powertec RF Directional Coupler (SKU: IBC-PT-00055, Part Number: PCM-DC6-6940.432) is a high-performance component designed for RF applications. Covering a frequency range of 698 to 3800 MHz, it offers a 6 dB coupling value with minimal signal loss, ensuring efficient power distribution. This coupler features a robust IP65-rated design, providing reliable operation in harsh environments with temperature tolerance from -25 °C to 75 °C.

Equipped with 4.3-10 Female connectors on all ports, it maintains a low VSWR of 1.3:1 and an insertion loss of only 0.80 dB. It delivers excellent inter-port isolation of over 28 dB, enhancing signal integrity. The device's 3rd Order PIM rating of 155 dBc further ensures superior performance in demanding RF applications. Its 50  $\Omega$  input impedance is standard for seamless integration into various systems.

This coupler complies with RoHS standards, underscoring its environmentally friendly design. With...

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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:	6 dB	PIM, 3rd Order:	-155 dBc

#### Port Matrix

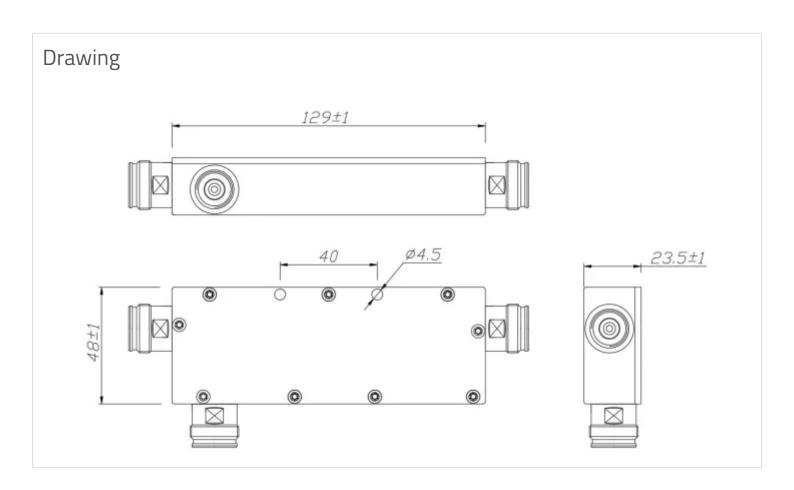
Port Function	RF Interface
Input	4.3-10 Female
Output	4.3-10 Female
Coupled	4.3-10 Female

### Frequency Test Data

Start Frequency	Stop Frequency	VSWR	Insertion Loss	Inter-Port Iso.
698 MHz	3800 MHz	< 1.3:1	0.8 dB	> 28 dB

# **Physical Specification**

Input Ports:	1	Min. Operating Temperature:	-25 °C
Output Ports:	2	Max. Operating Temperature:	75 °C
Subtype:	Directional Coupler	Compliance/Certifications:	RoHS
Ingress Protection:	IP65		
Dimensions:	129x40x23.5		
Weight:	0.38 kg		



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