POWERTEC | DATASHEET | UNCONTROLLED WHEN PRINTED PUBLIC | August 11, 2025 17:13

Page



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

CommScope Directional Coupler, 5 dB, 555-6000 MHz, 4.3-10 Female, - 165 dBc

SKU ACC-CS-00025 MPN C-5-UW-43-AI6

Description

The CommScope Directional Coupler (Model: C-5-UW-43-Al6, SKU: ACC-CS-00025) offers a coupling value of 5 dB across a broad frequency range of 555 to 6000 MHz. This RF passive component features 4.3-10 Female connectors for both input and output, ensuring compatibility and ease of integration in diverse systems. The coupler is designed to withstand challenging environments with an IP67 rating and operates reliably between -35°C and 85°C.

Engineered for optimal performance, it boasts a 3rd Order PIM rating of -165 dBc and maintains an input impedance of 50 Ω . It is ISO 9001 certified, reflecting its adherence to high-quality standards. The product ensures minimal signal loss and excellent isolation, with a VSWR of 1.2:1 and insertion loss of 2.40 dB from 555 to 2700 MHz. The inter-port isolation improves progressively from >17 dB at lower frequencies to >25 dB at the higher end of the spectrum.

Manufactured by CommScope, a leader in...

Read More





_

CommScope

CommScope (NASDAQ: COMM) helps design, build and manage wired and wireless networks around the world. As a communications infrastructure leader, we shape the always-on networks of tomorrow. For more than 40 years, our global team of greater than 20,000 employees, innovators and technologists have empowered customers in all regions of the world to anticipate what's next and push the boundaries of ...

RF Specification

Min. Frequency

555 MHz

Max. Frequency

6000 MHz

Coupling / Split

4.8 dB

Input Impedance

50 Ω

Max. Input Power

300 W

PIM, 3rd Order

-165 dBc

Port Matrix

Port Function RF Interface

Input 4.3-10 Female

Output 4.3-10 Female

Frequency Test Data

Start Frequency Stop Frequency VSWR Insertion Loss Inter-Port Iso.

555 MHz	2700 MHz	< 1.2:1 2.4 dB	> 17 dB
2700 MHz	3800 MHz	< 1.25:1	> 21 dB
3800 MHz	4900 MHz	< 1.3:1	> 23 dB
4900 MHz	6000 MHz		> 25 dB

Physical Specification

Input Ports

1

Output Ports

2

Subtype

Directional Coupler

Ingress Protection

IP67

Dimensions

156 by 70 by 23

Weight

0.36 kg

Min. Operating Temperature

-35 °C

Max. Operating Temperature

85 °C

Compliance/Certifications

ISO 9001 Quality Management

Disclaimer: Although care has been taken to ensure the accuracy, completeness and reliability of the information provided, Powertec assumes no responsibility therefore. The user of the information agrees that the information is subject to change without notice. Powertec assumes no responsibility for the consequences of use of such information, nor for any infringement of third party intellectual property rights which may result from its use. IN NO EVENT SHALL POWERTEC BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, OR INCIDENTAL DAMAGE RESULTING FROM, ARISING OUT OF OR IN CONNECTION WITH THE USE OF THE INFORMATION.

