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CommScope Directional Coupler, 13 dB, 555-6000 MHz, 4.3-10 Female, -165 dBc

SKU
ACC-CS-00021
MPN
C-13-UW-43-AI6

Description

The CommScope Directional Coupler (SKU: ACC-CS-00021, Part No: C-13-UW-43-AI6) is designed for optimal RF signal management across a wide frequency range from 555 MHz to 6000 MHz. With a coupling factor of 13 dB, this coupler ensures efficient signal distribution. It features a robust IP67 rating for superior dust and water resistance, making it ideal for challenging environments.

Equipped with 4.3-10 Female connectors on the input, output, and coupled ports, this coupler maintains consistent connectivity. It operates effectively within a temperature range of -35°C to 85°C and supports a PIM rating of -165 dBc, ensuring minimal interference in high-performance networks. The input impedance is rated at 50 Ω for seamless integration into existing systems.

Performance metrics include a VSWR of <1.2:1 and an insertion loss of 0.50 dB between 555 MHz and 2700 MHz, with inter-port isolation exceeding 33 dB. Across different bands, the VSWR remains below 1.3:1, while maintaining significant isolation for reliable signal integrity.

Manufactured by CommScope, a leader in telecommunications infrastructure, this directional coupler complies with ISO 9001 quality standards, ensuring dependable performance and reliability in professional RF applications.



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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
13 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
Coupled	4.3-10 Female

Frequency Test Data

Start Frequency	Stop Frequency	VSWR	Insertion Loss	Inter-Port Iso.
555 MHz	2700 MHz	< 1.2:1	0.5 dB	> 33 dB
2700 MHz	3800 MHz	< 1.25:1		> 31 dB
3800 MHz	4900 MHz	< 1.3:1		> 29 dB
4900 MHz	6000 MHz			> 26 dB

Physical Specification

Input Ports
1
Output Ports
2
Subtype
Directional Coupler
Ingress Protection
IP67
Dimensions
159 x 72 x 22

Weight
0.38 kg
Min. Operating Temperature
-35 °C
Max. Operating Temperature
85 °C
Compliance/Certifications
ISO 9001 Quality Management

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