

CommScope Directional Coupler, 20 dB, 555-6000 MHz, 4.3-10 Female, -165 dBc

SKU: ACC-CS-00023

MPN: C-20-UW-43-AI6

Description

The CommScope Directional Coupler (SKU: ACC-CS-00023, Part Number: C-20-UW-43-AI6) is a high-performance RF passive component designed for efficient signal distribution. Operating within a frequency range of 555-6000 MHz, this coupler provides a coupling value of 20 dB. It features a robust IP67-rated design, ensuring durability in harsh environments, and operates efficiently in temperatures from -35 °C to 85 °C.

Key electrical specifications include a 3rd Order PIM rating of -165 dBc and a standard input impedance of 50 Ω. The coupler offers a VSWR of 1.3:1 for frequencies 4900-6000 MHz, with insertion loss at 0.30 dB and inter-port isolation >30 dB. For frequencies 555-2700 MHz, the VSWR is 1.2:1 with isolation >35 dB. Between 3800-4900 MHz, it maintains a VSWR of 1.3:1 and isolation >36 dB, and for 2700-3800 MHz, the isolation exceeds 38 dB.

Equipped with 4.3-10 Female connectors on the input, output, and coupled ports, it meets ISO...

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RF Specification

| | | | |
|-------------------|----------|-------------------|----------|
| Min. Frequency: | 555 MHz | Input Impedance: | 50 |
| Max. Frequency: | 6000 MHz | Max. Input Power: | 300 W |
| Coupling / Split: | 20 dB | 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. |
|-----------------|----------------|----------|----------------|-----------------|
| 4900 MHz | 6000 MHz | < 1.3:1 | 0.3 dB | > 30 dB |
| 555 MHz | 2700 MHz | < 1.2:1 | | > 35 dB |
| 3800 MHz | 4900 MHz | < 1.3:1 | | > 36 dB |
| 2700 MHz | 3800 MHz | < 1.25:1 | | > 38 dB |

Physical Specification

| | | | |
|---------------------|---------------------|-----------------------------|-----------------------------|
| Input Ports: | 1 | Min. Operating Temperature: | -35 °C |
| Output Ports: | 2 | Max. Operating Temperature: | 85 °C |
| Subtype: | Directional Coupler | Compliance/Certifications: | ISO 9001 Quality Management |
| Ingress Protection: | IP67 | RoHS | |
| Dimensions: | 159 by 72 by 22 | | |
| Weight: | 0.38 kg | | |

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