PRODUCT DATASHEET
CDS6-43-694/3800
6dB Directional Coupler

RFS CDS*-43 series Directional Couplers have been designed for a variety of wireless applications in the frequency band from 694 to 3800 MHz . The unit couples off a defined fraction of a RF signal from 5 to 30 dB with minimal reflections or loss. The broad frequency range is ideally suited for multi-band distributed antenna systems or in combination with RADIAFLEX® radiating cables.
FEATURES / BENEFITS

- 4.3-10-female interfaces
- PIM optimized design (160dBc @2x43dBm)

- Low insertion loss
- High power handling
- Small size, low weight


## Technical features

## STRUCTURE

| Product Type |  |  |
| :--- | :--- | :--- |
| Techn. Application |  | Directional Coupler |
| Number of Input Ports |  | Indoor |
| Number of Output Ports |  | 1 |

ELECTRICAL SPECIFICATIONS

| Frequency <br> Range | MHz | $694-3800$ |
| :--- | :---: | :---: |
| Connector Type |  | $4.3-10$ female |
| Max. VSWR / <br> Return Loss | $\mathrm{VSWR} / \mathrm{dB}$ | $1.30 / 17.7(1.3)$ |
| Insertion Loss <br> max. | dB | 1.7 |
| Coupling Value | dB | 6 |
| Coupling <br> Flatness max. | dB | $\pm 0.8$ |
| Intermodulation <br> (IM3) |  | $-160 \mathrm{dBC}(2 \times 43 \mathrm{dBm})$ |
| IMpance |  |  |

Impedance Ohm 50

Total Input Power
W 400

TEMPERATURE SPECIFICATIONS

| Temperature Range | ${ }^{\circ} \mathrm{C}\left({ }^{\circ} \mathrm{F}\right)$ | -25 to $+65(-13$ to +149$)$ |  |
| :--- | :---: | :---: | :---: |
| MECHANICAL SPECIFICATIONS |  |  |  |
| Height | $\mathrm{mm}(\mathrm{in})$ | $28.4(1.12)$ |  |
| Width | $\mathrm{mm}(\mathrm{in})$ | $69.2(2.72)$ |  |
| Length | $\mathrm{mm}(\mathrm{in})$ | $174.8(6.88)$ |  |

## TESTING AND ENVIRONMENTAL

| Environmental Class |  | IP65 |
| :--- | :--- | :--- |

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External Document Links

Notes
Directivity: $\geq 20 \mathrm{~dB}$ @ 694-2700MHz, $\geq 18 \mathrm{~dB}$ @ $2700-3800 \mathrm{MHz}$

