



**PRODUCT DESCRIPTION**

RFS' CDS\*-43 series of Directional Couplers have been designed for a variety of wireless applications in the frequency band from 555 to 6000MHz. The units couple off a defined fraction of a RF signal from 5 to 30 dB (depending on the model number) 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**

- **Broadband 555MHz-6000MHz**
- 4.3-10 Female Interface
- PIM Optimized Design (163dBc @2x43dBm)
- Low Insertion Loss
- High Power Handling
- Small Size, Low Weight

**TECHNICAL FEATURES**

**ELECTRICAL SPECIFICATIONS**

<b>Frequency Range</b>	MHz	555-6000
<b>VSWR</b>		1.20:1@555-2700MHz, 1.25:1@2700-3800MHz, 1.30:1@3800-6000MHz
<b>Power Rating</b>	W	300
<b>PIM 3rd @2*43 dBm</b>	dBc	163
<b>Input Impedance</b>	Ohm	50

**MECHANICAL SPECIFICATIONS**

<b>Connectors</b>		4.3-10 Female
<b>Number of Input Ports</b>		1
<b>Number of Output Ports</b>		2
<b>Net Weight ±10%</b>	kg (lb)	0.34 (0.75)
<b>Temperature Range</b>	°C	-25 to +65
<b>IP Level</b>		IP66
<b>RoHS</b>		Compliant



**MODEL NUMBER SPECIFICATIONS**

Model Number		CDS5-43-555/6000	CDS6-43-555/6000	CDS8-43-555/6000	CDS10-43-555/6000
Coupling Loss	dB	5.0	6.0	8.0	10.0
Coupling Tolerance	dB	5.0±1.15	6.0±1.2	8.0±1.2	10.0±1.25
Isolation	dB	25@555-2700MHz 23@2700-3800MHz 21@3800-4900MHz 17@4900-6000MHz	26@555-2700MHz 24@2700-3800MHz 22@3800-4900MHz 18@4900-6000MHz	28@555-2700MHz 24@2700-4900MHz 22@4900-6000MHz	30@555-2700MHz 26@2700-6000MHz
Insertion Loss	dB	2.45	1.9	1.25	0.8
Dimensions, L*W*H	mm (in)	156.5*60*29.5 (6.16*2.36*1.16)	156.5*60*23.5 (6.16*2.36*0.93)	156.5*60*23.5 (6.16*2.36*0.93)	159*62*22 (6.26*2.44*0.87)

**MODEL NUMBER SPECIFICATIONS**

Model Number		CDS13-43-555/6000	CDS15-43-555/6000	CDS20-43-555/6000	CDS30-43-555/6000
Coupling Loss	dB	13.0	15.0	20.0	30
Coupling Tolerance	dB	13.0±1.3	15.0±1.35	20.0±1.4	30.0±1.55
Isolation	dB	33@555-2700MHz 30@2700-4900MHz 27@4900-6000MHz	34@555-3800MHz 32@3800-4900MHz 28@ 4900-6000MHz	38@555-4900MHz 32@4900-6000MHz	46@555-2700MHz 43@2700-4900MHz 39@4900-6000MHz
Insertion Loss	dB	0.6	0.5	0.3	0.3
Dimensions, L*W*H	mm (in)	159*62*22 (6.26*2.44*0.87)	159*62*22 (6.26*2.44*0.87)	159*62*22 (6.26*2.44*0.87)	159*62*22 (6.26*2.44*0.87)

**External Document Links**

[LINK to VEX FILES](#)

**Notes**