

DC Pass Directional Coupler

50Ω Up to 5W 800 to 1600 MHz

ZADC-20-50DC+



SMA version shown
CASE STYLE: CC51-1

Connectors	Model	Price	Qty.
SMA	ZADC-20-50DC-S+	\$79.95 ea.	(1-9)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
DC Current	2A

Permanent damage may occur if any of these limits are exceeded.

Coaxial Connections

INPUT	1
OUTPUT	3
COUPLED	2

Features

- wideband, 800 to 1600 MHz
- low insertion loss, 0.8 dB typ.
- good directivity, 20 dB typ.
- Mainline Loss at 5 to 100 MHz 0.1 dB typ.
- DC current through input to output 2A Max.

Applications

- cellular
- PCS
- labs

Directional Coupler Electrical Specifications

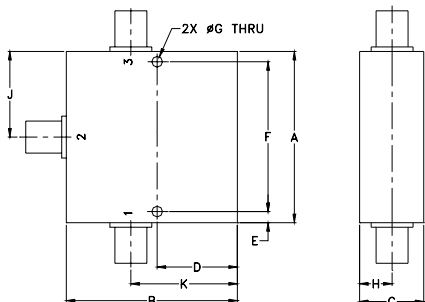
FREQ. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS ¹		DIRECTIVITY (dB)		VSWR (:1)	POWER INPUT (W)
	Nom.	Flatness	Typ.	Max.	Typ.	Min.	Typ.	Max.
800-1600	20±1	±1.1	0.8	1.0	20	11	1.2	5
800-1000	20.5±1	±0.75	0.7	0.9	24	18	1.2	5
1000-1600	20±1	±0.5	0.8	1.0	18	11	1.2	5

1. Mainline loss includes theoretical power loss at coupled port.

Typical Performance Data

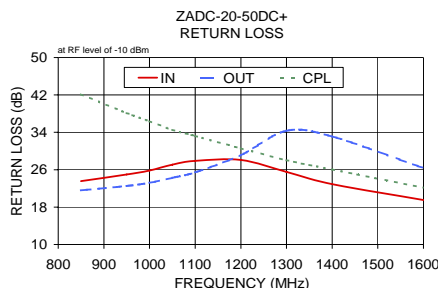
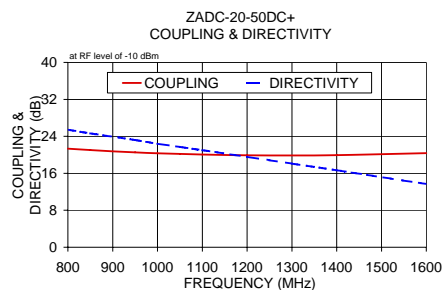
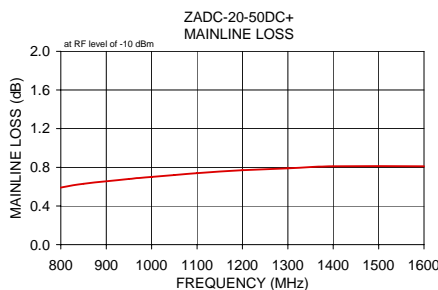
Frequency (MHz)	Mainline Loss (dB)		Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
	In-Out	In-Cpl			In	Out	Cpl
800.00	0.59	21.32	25.44	23.23	21.47	44.11	
850.00	0.63	21.02	24.65	23.57	21.59	42.12	
950.00	0.68	20.53	23.21	24.98	22.52	38.12	
1000.00	0.70	20.34	22.41	25.81	23.22	36.36	
1050.00	0.72	20.19	21.69	27.08	24.26	34.54	
1100.00	0.74	20.07	21.00	27.91	25.45	33.19	
1200.00	0.77	19.91	19.55	28.08	29.13	30.57	
1300.00	0.79	19.86	18.11	25.54	34.35	28.04	
1400.00	0.81	19.92	16.65	22.92	33.12	26.05	
1600.00	0.81	20.36	13.68	19.53	26.37	22.15	

Outline Drawing

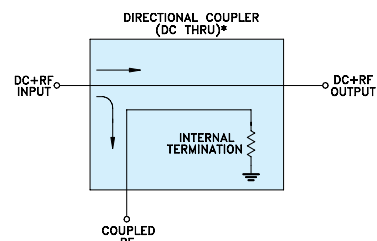


Outline Dimensions (inch/mm)

A	B	C	D	E	F
2.00	2.00	.75	.938	.13	1.750
50.80	50.80	19.05	23.83	3.30	44.45
G	H	J	K	wt	
.125	.38	1.00	1.25	grams	
3.18	9.65	25.40	31.75	145.0	



Electrical Schematic



* ELECTRICAL SCHEMATIC FOR DIRECTIONAL COUPLER THAT IS DESIGNED WITHOUT INTERNAL TRANSFORMERS. For detailed performance specs & shipping online see web site

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IF/RF MICROWAVE COMPONENTS

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