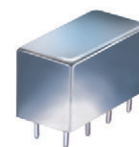


Plug-In Bi-Directional Coupler

PDC-10-1BD+

50Ω 1 to 400 MHz



CASE STYLE: A01
PRICE: \$13.70 ea. QTY. (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
Permanent damage may occur if any of these limits are exceeded.	

Pin Connections

INPUT	1
OUTPUT	4
COUPLED (forward)	3
COUPLED (reverse)	6
GROUND	2,5,7,8
CASE GROUND	2,5,7,8

Features

- wideband, 1 to 400 MHz
- up to 4W power input
- excellent directivity, 35 dB typ.
- low mainline loss, 0.8 dB typ.
- rugged welded construction, hermetically sealed

Applications

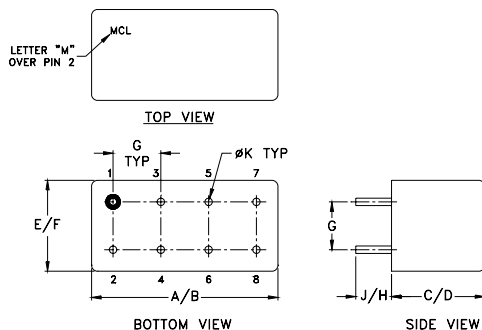
- VHF/UHF
- communication receivers & transmitters
- instrumentation

Directional Coupler Electrical Specifications

FREQ. (MHz)	COUPLING (dB)		MAINLINE LOSS ¹ (dB)						DIRECTIVITY (dB)						VSWR (:1)	POWER INPUT, W		
	Nom.	Flatness	L		M		U		L		M		U			Typ.	L	MU
			Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.				
f _L -f _U																		
1-400	11.5±0.5	±0.5	0.6	0.9	0.8	1.1	0.9	1.3	55	35	35	20	22	15	1.2	2.0	4.0	

L = low range [f_L to 10 f_L] M = mid range [10 f_L to f_U/2] U = upper range [f_U/2 to f_U]
1. Mainline loss includes theoretical power loss at coupled port.

Outline Drawing

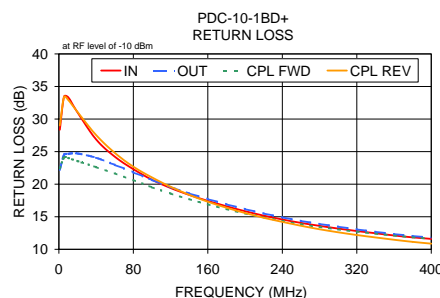
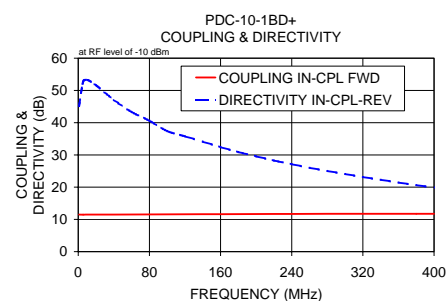
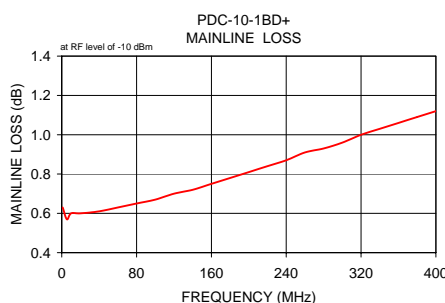


Outline Dimensions (inch/mm)

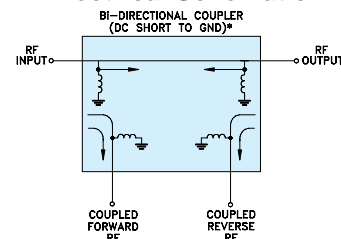
A	B	C	D	E	F
.770	.800	.385	.400	.370	.400
19.56	20.32	9.78	10.16	9.40	10.16
G	H	J	K	wt	
.200	.20	.14	.031	grams	
5.08	5.08	3.56	0.79	5.2	

Typical Performance Data

Frequency (MHz)	Mainline Loss (dB)		Coupling (dB)		Directivity (dB)		Return Loss (dB)			
	In-Out	In-Cpl Fwd	Out-Cpl Rev	Out-Cpl Fwd	In-Cpl Rev	In	Out	Cpl Fwd	Cpl Rev	
1.00	0.63	11.50	11.50	81.10	45.13	28.35	22.22	22.43	29.02	
5.50	0.57	11.47	11.45	46.78	52.71	33.44	24.48	24.09	33.36	
10.00	0.60	11.49	11.48	41.73	53.31	33.34	24.67	24.02	32.94	
20.00	0.60	11.49	11.48	37.25	51.62	31.02	24.71	23.55	31.09	
40.00	0.61	11.51	11.48	34.59	47.08	26.87	24.06	22.62	27.54	
80.00	0.65	11.55	11.54	32.34	40.59	22.30	21.81	20.63	22.68	
160.00	0.75	11.63	11.67	27.76	32.42	17.43	17.71	16.91	17.30	
240.00	0.87	11.70	11.84	23.89	27.12	14.58	14.90	14.36	14.21	
320.00	1.00	11.74	12.05	20.01	23.15	12.81	13.06	12.71	12.19	
400.00	1.12	11.74	12.27	17.04	19.89	11.60	11.78	11.62	10.87	



Electrical Schematic



* ELECTRICAL SCHEMATIC IS FOR BI-DIRECTIONAL COUPLER WITH INTERNAL TRANSFORMERS THAT ROUTES DC FROM RF PORTS TO GROUND.

For detailed performance specs & shopping online see web site

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IF/RF MICROWAVE COMPONENTS

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