

Plug-In Directional Coupler

PDC-10-2

50Ω 250 to 1000 MHz

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	3
GROUND	2,5,7,8
CASE GROUND	2,5,7,8
NOT USED	6

Features

- wideband, 250 to 1000 MHz
- up to 5W power input
- rugged welded construction, hermetically sealed

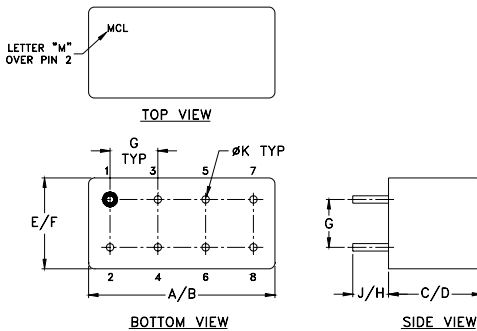
Applications

- VHF/UHF
- cellular
- instrumentation
- communication



CASE STYLE: A01
PRICE: \$36.70 ea. QTY. (1-9)

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

Directional Coupler Electrical Specifications

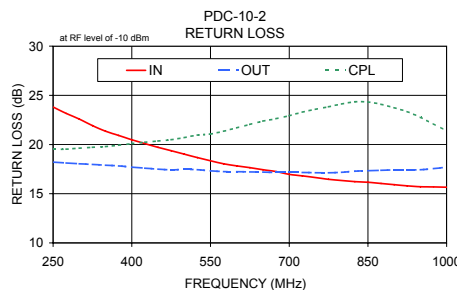
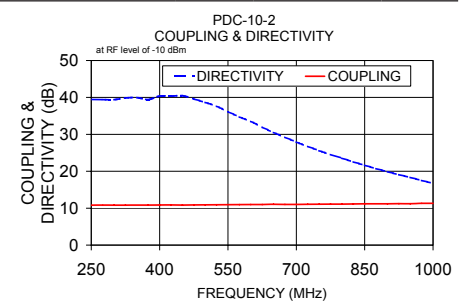
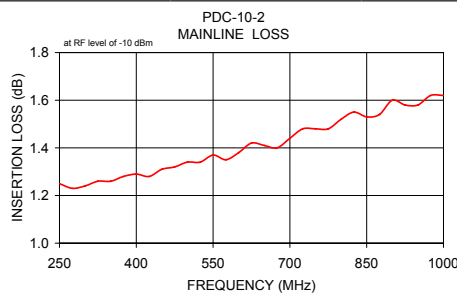
FREQ. (MHz)	COUPLING (dB)		MAINLINE LOSS ¹ (dB)				DIRECTIVITY (dB)				VSWR (:1)	POWER INPUT, W
	Nom.	Flatness	L		U		L		U			
			Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.		
250-1000	10.5±0.5	±0.6	1.4	1.6	1.6	2.0	30	23	25	15	1.5	5.0

$$L = f_c - 2f_c \quad U = f_c/2 - f_c$$

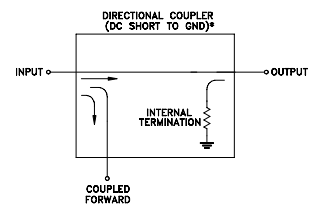
1. Mainline loss includes theoretical power loss at coupled port.

Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
				In	Out	Cpl
250.00	1.25	10.82	39.47	23.81	18.22	19.51
300.00	1.24	10.81	39.40	22.59	18.05	19.63
400.00	1.29	10.87	40.37	20.48	17.71	20.09
500.00	1.34	10.91	38.67	19.02	17.47	20.70
600.00	1.38	10.99	33.53	17.83	17.24	21.69
700.00	1.44	11.02	27.91	16.97	17.16	22.93
800.00	1.52	11.10	23.55	16.34	17.18	24.12
900.00	1.60	11.19	19.89	15.92	17.42	23.75
950.00	1.58	11.20	18.34	15.71	17.44	22.77
1000.00	1.62	11.31	16.77	15.66	17.70	21.42



Electrical Schematic



* ELECTRICAL SCHEMATIC IS FOR DIRECTIONAL COUPLER WITH INTERNAL TRANSFORMER(S) 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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