

Plug-In

Directional Coupler

50Ω

0.5 to 500 MHz

PDC-10-1+



CASE STYLE: A01

PRICE: \$15.70 ea. QTY. (1-9)

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, 0.5 to 500 MHz
- excellent directivity, 32 dB typ.
- low mainline loss, 0.85 dB typ.
- rugged welded construction, hermetic

Applications

- VHF/UHF
- power levelling monitoring
- instrumentation

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

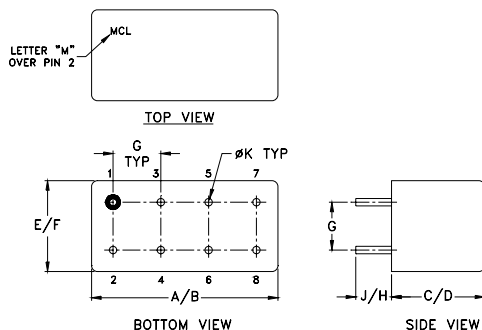
Directional Coupler Electrical Specifications

FREQ. (MHz)	COUPLING (dB)		MAINLINE LOSS ¹ (dB)						DIRECTIVITY (dB)						VSWR (:1)	POWER INPUT, W	
			L		M		U		L		M		U			L	MU
	f _L -f _U	Nom.	Flatness	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.		Min.	Typ.
0.5-500	11.5±0.5	±0.6	0.85	1.3	0.65	1.0	0.85	1.3	32	25	32	25	22	15	1.2	1.5	3.0

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



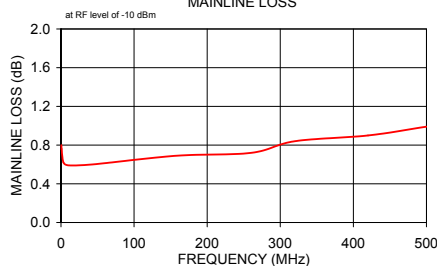
Outline Dimensions (inch/mm)

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

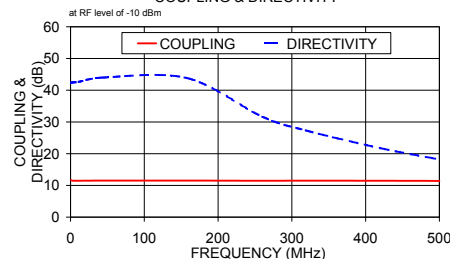
Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
				In	Out	Cpl
0.50	0.80	11.64	42.32	24.01	18.42	19.01
0.90	0.76	11.62	42.36	26.26	19.13	19.85
3.40	0.62	11.48	42.46	33.23	20.95	21.81
11.00	0.59	11.46	42.63	38.68	21.51	22.33
43.00	0.60	11.51	43.97	36.45	21.47	22.23
158.00	0.69	11.52	43.84	26.94	20.89	22.26
260.00	0.72	11.48	31.65	23.01	20.10	22.34
320.00	0.84	11.49	27.26	21.41	19.56	22.25
420.00	0.90	11.47	21.73	19.41	18.68	21.52
500.00	0.99	11.43	18.20	18.24	18.05	20.30

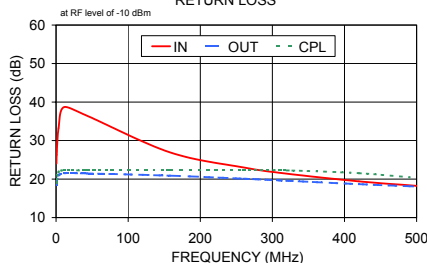
PDC-10-1+
MAINLINE LOSS



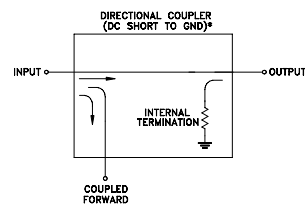
PDC-10-1+
COUPLING & DIRECTIVITY



PDC-10-1+
RETURN LOSS



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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ISO 9001 ISO 14001 AS 9100 CERTIFIED

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IF/RF MICROWAVE COMPONENTS

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