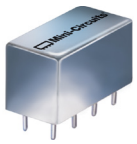
Plug-In

Directional Coupler

PDC-10-6-75

75Ω 0.2 to 100 MHz



CASE STYLE: A01
PRICE: $26.20 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

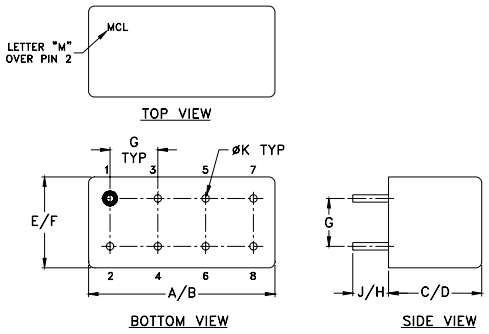
Features

- excellent directivity, 40 dB typ.
- low mainline loss, 0.9 dB typ.
- rugged welded construction, hermetically sealed

Applications

- HF/VHF
- defense & federal communications
- power levelling & monitoring

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

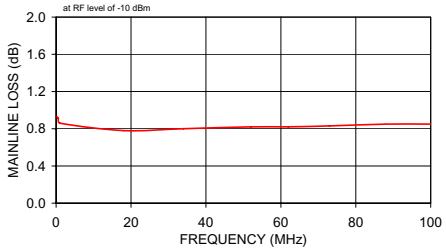
FREQ. (MHz)	COUPLING (dB)		MAINLINE LOSS[1] (dB)						DIRECTIVITY (dB)						VSWR (:1)	POWER INPUT, W	
			L		M		U		L		M		U			L	MU
f_L-f_U	Nom.	Flatness	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Max.
0.2-100	10.0±0.5	±0.2	1.2	1.6	0.9	1.2	0.9	1.3	50	30	40	25	37	25	1.5	1.0	2.0

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.

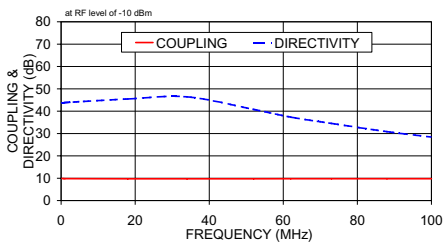
Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB) In	Return Loss (dB) Out	Return Loss (dB) Cpl
0.20	0.93	9.89	43.78	21.53	17.97	17.77
0.60	0.91	9.85	43.64	28.13	19.77	19.86
1.00	0.86	9.81	43.86	29.20	20.40	20.56
18.00	0.78	9.73	45.45	28.82	21.98	22.00
34.00	0.80	9.73	46.44	28.45	22.08	21.51
52.00	0.82	9.75	40.79	28.17	22.03	20.49
62.00	0.82	9.76	37.37	27.94	21.96	19.82
73.00	0.83	9.76	34.54	27.52	21.95	19.09
88.00	0.85	9.76	30.86	26.80	22.04	18.22
100.00	0.85	9.76	28.43	26.25	22.14	17.60

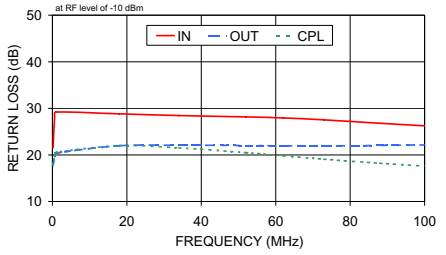
PDC-10-6-75
MAINLINE LOSS



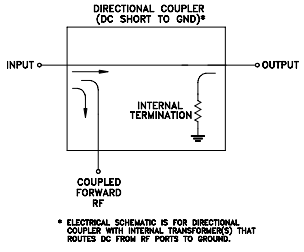
PDC-10-6-75
COUPLING & DIRECTIVITY



PDC-10-6-75
RETURN LOSS



Electrical Schematic



Notes
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