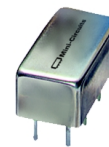


# Directional Coupler

PDC-10-6-75

75Ω

0.2 to 100 MHz



CASE STYLE: A01  
PRICE: \$23.95 ea. QTY (1-9)

## Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C

## Pin Connections

INPUT	1
OUTPUT	4
COUPLED	3
CASE GND	2,5,7,8
NOT USED	6

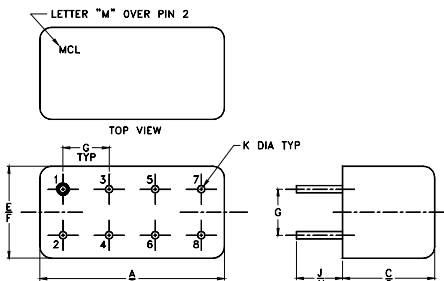
## Features

- excellent directivity, 40 dB typ.
- low insertion loss, 0.9 dB typ.
- rugged welded construction

## Applications

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

## Outline Drawing



NOTE: BLUE BEAD INDICATES PIN 1. PIN NUMBERS DO NOT APPEAR ON UNIT, FOR REFERENCE ONLY.

## 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. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS <sup>1</sup> (dB)			DIRECTIVITY (dB)			VSWR (:1)	POWER INPUT, W							
	Nom.	Flatness	L	M	U	L	M	U		L	MU						
$f_L$ - $f_U$			Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	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

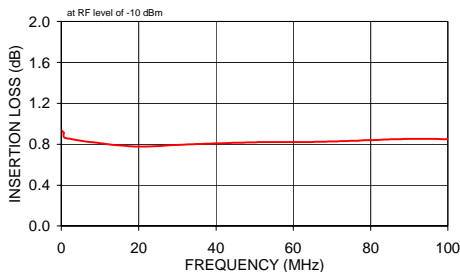
L = low range [ $f_L$  to  $10 f_L$ ] M = mid range [ $10 f_L$  to  $f_U/2$ ] U = upper range [ $f_U/2$  to  $f_U$ ]

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

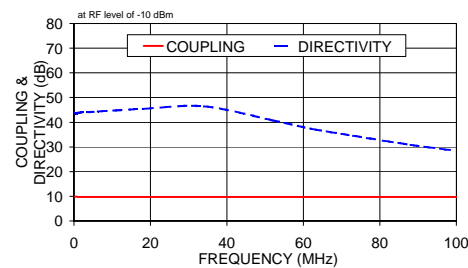
## Typical Performance Data

Frequency (MHz)	Insertion Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
				In	Out	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

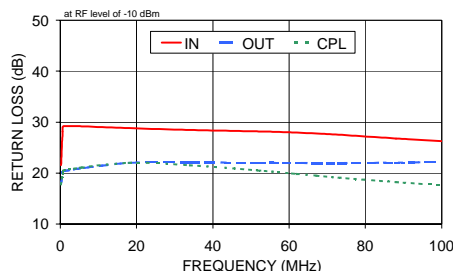
PDC-10-6-75 INSERTION LOSS



PDC-10-6-75 COUPLING & DIRECTIVITY



PDC-10-6-75 RETURN LOSS



electrical schematic

