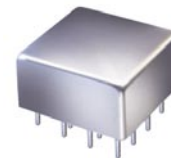


Directional Coupler

50Ω

0.1 to 2000 MHz

PDC-20A-5



CASE STYLE: C145

PRICE: \$47.20 ea. QTY. (1-9)

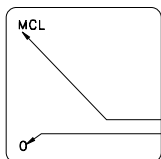
Maximum Ratings

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

Pin Connections

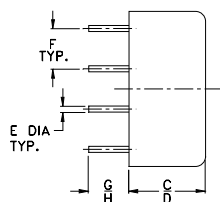
INPUT	14
OUTPUT	8
COUPLED	5
GROUND	all other pins
CASE GROUND	all other pins

Outline Drawing



NOTE: BLUE BEAD INDICATES PIN 1. PIN NUMBERS DO NOT APPEAR ON UNIT, FOR REFERENCE ONLY. PINS 6,7,10,11 OMITTED - C145

LETTER "M" OVER PIN 13
"O" OVER PIN 1



Outline Dimensions (inch/mm)

A	B	C	D	E
.770	.810	.380	.410	.030
19.56	20.57	9.65	10.41	0.76
F	G	H		wt
.200	.20	.14		grams
5.08	5.08	3.56		11.0

Features

- very wideband, 0.1 to 2000 MHz
- good directivity, 25 dB typ.
- excellent insertion loss, 0.6 dB typ.
- rugged welded construction, hermetically sealed

Applications

- cellular/GPS
- instrumentation
- communications receivers & transmitters
- defense & federal communications

Directional Coupler Electrical Specifications

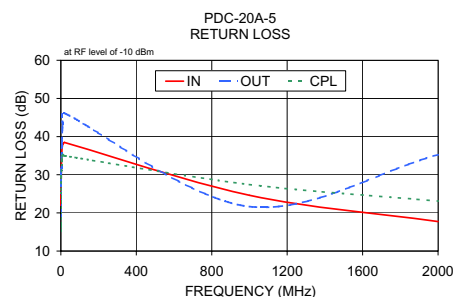
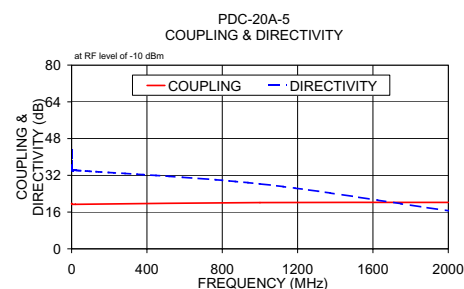
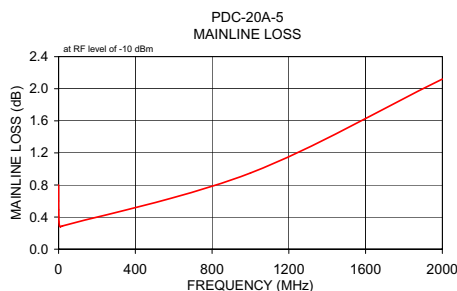
FREQ. (MHz)	COUPLING (dB)		MAINLINE LOSS ¹ (dB)						DIRECTIVITY (dB)						VSWR (:1)	POWER INPUT, W	
			L		M		U		L		M		U			L	MU
	f _L -f _U	Nom.	Flatness	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.		Min.	Typ.
0.1-2000	20.0±0.5	±1.0	0.6	1.5	0.6	1.5	1.9	2.9	34	20	25	15	20	10	1.5	0.5	2.0

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	Out	Cpl
0.10	0.80	19.80	42.90	22.32	18.40	15.30
0.20	0.60	19.71	41.29	22.12	19.73	17.14
0.50	0.49	19.57	37.18	23.02	23.62	22.88
1.00	0.41	19.50	35.94	26.29	27.31	26.01
2.00	0.34	19.42	34.63	29.91	31.22	29.52
5.00	0.29	19.36	33.94	35.77	38.05	33.98
10.00	0.28	19.36	34.20	38.00	43.40	35.28
20.00	0.29	19.39	34.18	38.45	46.13	34.97
1000.00	0.95	20.15	28.28	24.62	21.67	27.44
2000.00	2.12	20.22	16.58	17.72	35.28	23.10



electrical schematic

