

Plug-In

Directional Coupler

50Ω 40 to 400 MHz

PDC20-400HP



CASE STYLE: A01
PRICE: \$52.20 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	2
COUPLED	5
GROUND	3,4,6,7,8
CASE GROUND	3,4,6,7,8

Features

- high power, up to 10W power input
- wideband, 4 to 400 MHz
- low insertion loss, 0.2 dB typ.
- excellent directivity, 30 dB typ.
- rugged welded construction, hermetically sealed

Applications

- power levelling
- military & defense communications
- VSWR measurement

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	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.
40-400	21.5±0.5	±0.6	0.1	0.3	0.2	0.4	0.2	0.5	30	20	30	20	27	18	1.1	10.0	10.0

L = 40-100 MHz M = 100-200 MHz U = 200-400 MHz

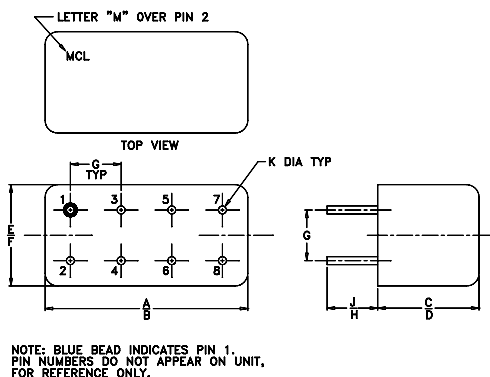
1. Mainline loss includes theoretical power loss at coupled port.

External heat sinking is recommended to reduce case temperature

Typical Performance Data

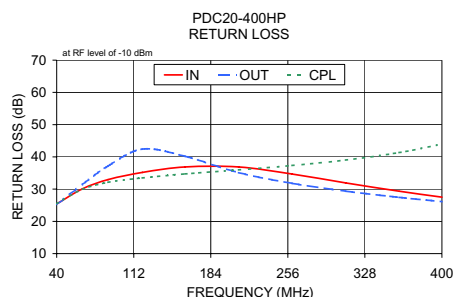
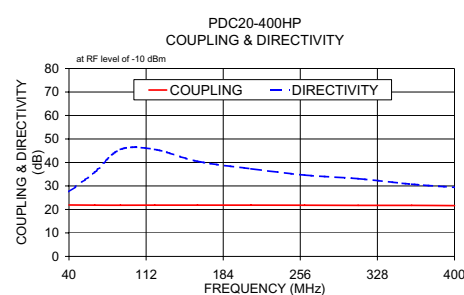
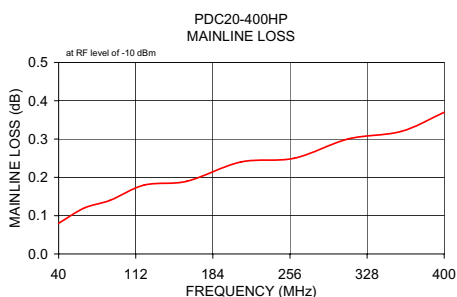
Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
				In	Out	Cpl
40.00	0.08	21.91	27.54	25.40	25.17	25.48
64.00	0.12	21.84	35.86	30.09	31.45	29.93
88.00	0.14	21.81	45.58	32.95	37.18	32.12
120.00	0.18	21.84	45.56	35.19	42.43	33.49
160.00	0.19	21.84	40.49	36.89	40.19	34.73
210.00	0.24	21.83	37.31	36.89	35.12	35.99
260.00	0.25	21.81	34.65	34.69	31.80	37.34
310.00	0.30	21.73	33.12	31.93	29.39	39.03
360.00	0.32	21.72	30.76	29.36	27.46	41.34
400.00	0.37	21.62	29.41	27.52	26.13	43.97

Outline Drawing

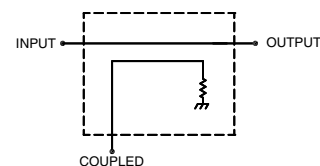


Outline Dimensions (inch/mm)

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



electrical schematic



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