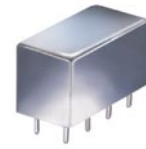


Directional Coupler

50Ω

0.2 to 250 MHz

PDC-20-3+
PDC-20-3


CASE STYLE: A01

PRICE: \$18.20 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	4
COUPLED	3
GROUND	2,5,7,8
CASE GROUND	2,5,7,8
NOT USED	6

Features

- excellent directivity, 33 dB typ.
- low mainline loss, 0.25 dB typ.
- up to 4W power input
- good VSWR, 1.2:1 typ.
- rugged welded construction, hermetically sealed

Applications

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

**+ RoHS compliant in accordance
with EU Directive (2002/95/EC)**

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** (dB)						DIRECTIVITY (dB)						VSWR (:1)	POWER INPUT, W	
			L		M		U		L		M		U				
	f _L -f _U	Norm.	Flatness	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.			
0.2-250	19.5±0.5	±0.5	0.35	0.6	0.25	0.5	0.35	0.6	36	30	33	25	25	20	1.2	1.5	4.0

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]

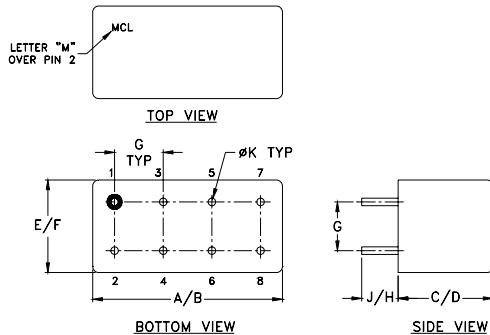
1. Mainline loss includes theoretical power loss at coupled port.

* Insertion loss specification in L range may degrade up to 1 dB at cold temperature, -55°C

Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
				In	Out	Cpl
0.20	0.29	19.42	39.65	22.30	21.91	21.73
0.60	0.30	19.43	39.51	28.91	27.26	28.15
1.00	0.27	19.39	39.77	30.93	28.75	30.08
9.00	0.21	19.33	40.19	40.70	34.16	39.85
26.00	0.21	19.34	41.15	40.44	34.09	40.06
81.00	0.24	19.35	46.36	35.00	32.30	36.98
128.00	0.25	19.36	48.96	31.81	30.48	33.86
151.00	0.25	19.34	43.44	30.66	29.73	32.37
206.00	0.27	19.37	34.46	28.27	27.91	28.82
250.00	0.28	19.40	29.83	27.05	26.87	26.10

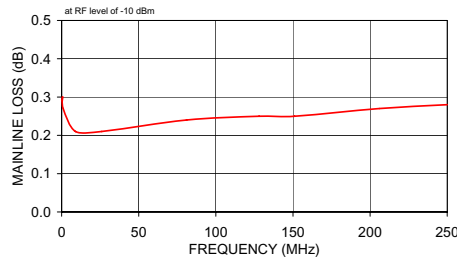
Outline Drawing



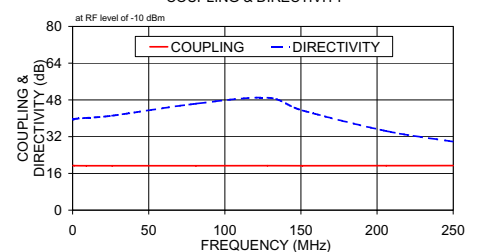
Outline Dimensions (inch/mm)

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		
.200	.20	.14	.031		
5.08	5.08	3.56	0.79		
				wt	grams
					5.2

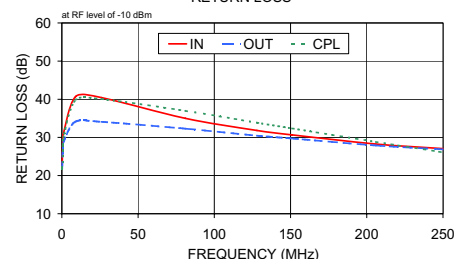
PDC-20-3
MAINLINE LOSS



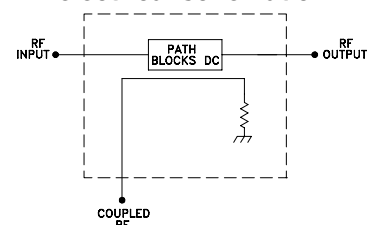
PDC-20-3
COUPLING & DIRECTIVITY



PDC-20-3
RETURN LOSS



electrical schematic



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