

Plug-In Directional Coupler

PDC-10-1+

50Ω 0.5 to 500 MHz



CASE STYLE: A01
PRICE: \$15.70 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

- wideband, 0.5 to 500 MHz
- excellent directivity, 32 dB typ.
- low mainline loss, 0.85 dB typ.
- rugged welded construction, hermetic

Applications

- VHF/UHF
- power levelling monitoring
- instrumentation

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

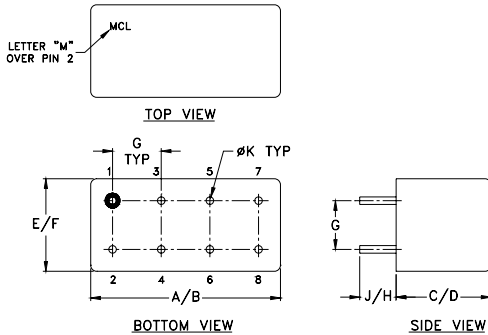
The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Directional Coupler Electrical Specifications

FREQ. (MHz)	COUPLING (dB)		MAINLINE LOSS ¹ (dB)						DIRECTIVITY (dB)						VSWR (:1)	POWER INPUT, W		
	Nom.	Flatness	L		M		U		L		M		U			Typ.	Max.	Max.
			Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.				
0.5-500	11.5±0.5	±0.6	0.85	1.3	0.65	1.0	0.85	1.3	32	25	32	25	22	15	1.2	1.5	3.0	

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.

Outline Drawing

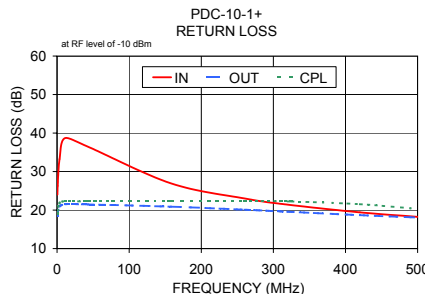
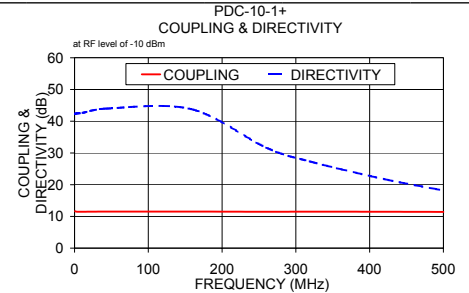
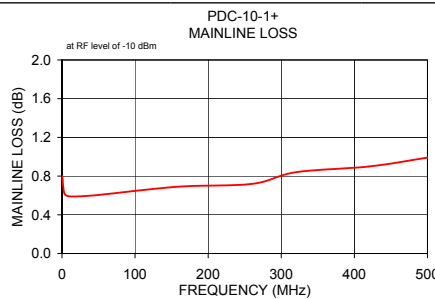


Outline Dimensions (inch/mm)

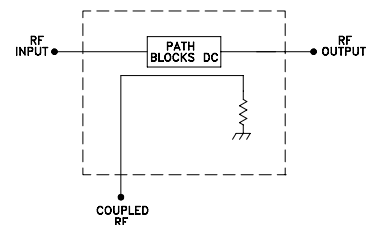
A	B	C	D	E	F
.770	.800	.385	.400	.370	.400
19.56	20.32	9.78	10.16	9.40	10.16
G	H	J	K	wt	
.200	.20	.14	.031	grams	
5.08	5.08	3.56	0.79	5.2	

Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
				In	Out	Cpl
0.50	0.80	11.64	42.32	24.01	18.42	19.01
0.90	0.76	11.62	42.36	26.26	19.13	19.85
3.40	0.62	11.48	42.46	33.23	20.95	21.81
11.00	0.59	11.46	42.63	38.68	21.51	22.33
43.00	0.60	11.51	43.97	36.45	21.47	22.23
158.00	0.69	11.52	43.84	26.94	20.89	22.26
260.00	0.72	11.48	31.65	23.01	20.10	22.34
320.00	0.84	11.49	27.26	21.41	19.56	22.25
420.00	0.90	11.47	21.73	19.41	18.68	21.52
500.00	0.99	11.43	18.20	18.24	18.05	20.30



electrical schematic



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