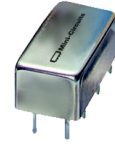


# Plug-In Directional Coupler

## PDC-10-21+ PDC-10-21

50Ω

1 to 1000 MHz



CASE STYLE: A01

PRICE: \$32.95 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 GROUND	2,5,7,8
NOT USED	6

### Features

- wideband, 1 to 1000 MHz
- excellent directivity, 25 dB typ.
- rugged welded construction

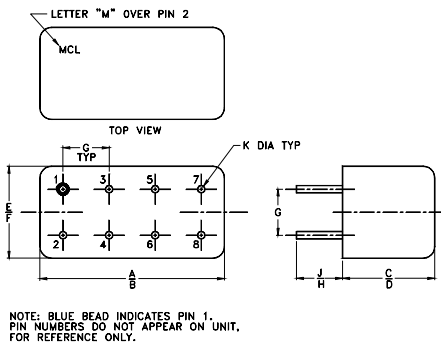
### Applications

- VHF/UHF
- cellular
- communications
- power levelling monitoring

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

See our web site for RoHS Compliance methodologies and qualifications.

### Outline Drawing



### 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.					
1-1000	11.0±0.5	±0.5	1.2	1.7	1.2	1.7	1.6	2.0	40	30	25	20	25	20	1.3	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.

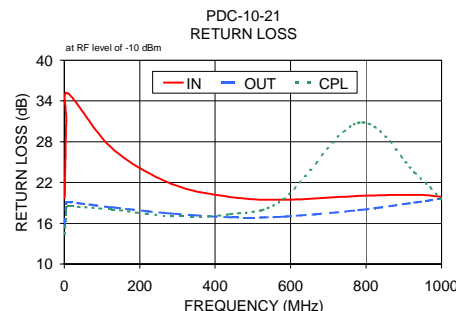
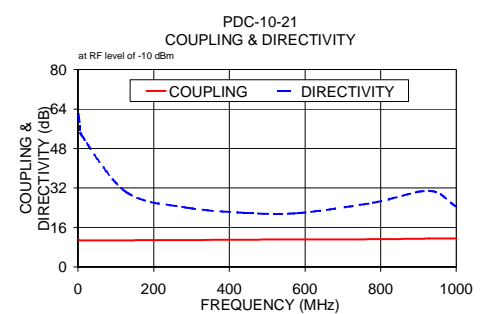
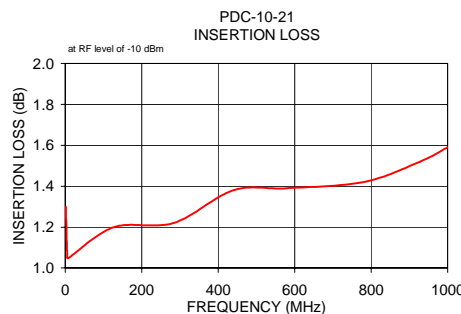
\* Upper range coupling ±0.75 dB

### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
				In	Out	Cpl
1.00	1.30	11.23	62.01	19.71	15.71	14.37
5.00	1.05	10.76	57.11	31.10	18.98	17.90
9.00	1.05	10.73	53.48	35.13	19.15	18.46
127.00	1.20	10.82	30.42	27.00	18.33	18.02
283.00	1.22	10.94	24.19	21.83	17.43	17.05
440.00	1.38	11.08	21.95	19.86	16.88	17.33
580.00	1.39	11.13	21.83	19.45	16.96	19.49
780.00	1.42	11.27	26.01	20.01	17.93	30.79
928.00	1.52	11.49	30.86	20.19	19.03	23.53
1000.00	1.59	11.60	24.46	19.91	19.64	19.50

### 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

