

High Power

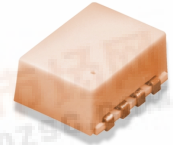
# Directional Coupler

**NEW!**

**JYDC-23-1HP**

50Ω

30 to 500 MHz



CASE STYLE: BJ937  
PRICE: \$22.95 ea. QTY (10-49)

## Maximum Ratings

Operating Temperature	-45°C to 85°C
Storage Temperature	-55°C to 100°C

## Pin Connections

INPUT	1
OUTPUT	7
COUPLED	3
GROUND	2,4,6,8
50Ω TERM (EXTERNAL)	5

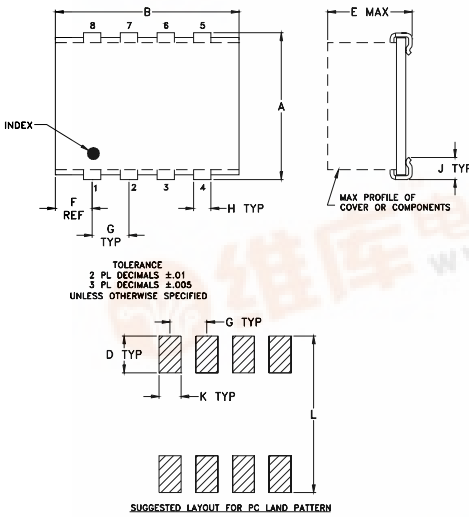
## Features

- low insertion loss, 0.2 dB typ.
- excellent VSWR, 1.10:1 typ.
- high power handling, 10 watts
- excellent directivity 24 dB typ.
- protected by patent 6,140,887

## Applications

- VHF/UHF receivers
- cellular

## Outline Drawing



## Directional Coupler Electrical Specifications

FREQ. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS (dB)			DIRECTIVITY (dB)			VSWR (:1)	POWER INPUT, W		
	Nom.	Max. Flatness	L	M	U	L	M	U		Typ.	L	MU
$f_L$ - $f_U$			Typ. Max.	Typ. Max.	Typ. Max.	Typ. Min.	Typ. Min.	Typ. Min.			Max.	Max.
30-500	23.5±1	±1.2	0.1 0.3	— —	0.2 0.4	26 20	— —	23 19	1.1	10	10	

L= 30-250 MHz U= 250-500 MHz

## Typical Performance Data

Frequency (MHz)	Insertion Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
				In	Out	Cpl
30.00	0.06	24.46	22.36	24.03	23.99	24.61
50.00	0.06	24.42	22.73	27.59	27.48	28.28
100.00	0.09	24.28	24.26	31.22	30.88	31.98
200.00	0.14	24.12	25.17	30.44	30.18	31.42
250.00	0.16	24.01	25.05	29.38	29.08	30.54
300.00	0.17	23.88	25.01	28.08	28.14	29.60
350.00	0.19	23.74	24.78	27.31	27.26	27.75
400.00	0.20	23.59	24.66	26.41	26.30	26.19
450.00	0.22	23.44	24.35	25.87	25.70	24.40
500.00	0.24	23.29	23.92	25.39	24.91	22.63

## Outline Dimensions (inch mm)

A	B	C	D	E	F	G
.395	.520	—	.100	.230	.110	.100
10.03	13.21	—	2.54	5.84	2.79	2.54
H	J	K	L	wt.		
.047	.065	.065	.425	grams		
1.19	1.65	1.65	10.80	.85		

## Demo Board MCL P/N: TB-194 Suggested PCB Layout (PL-118)

