

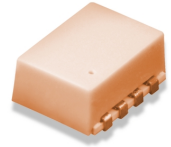
Directional Coupler

50Ω

30 to 500 MHz

NEW!

JYDC-23-1HP



CASE STYLE: BJ937

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

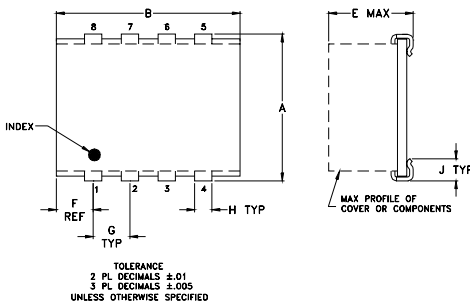
Maximum Ratings

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

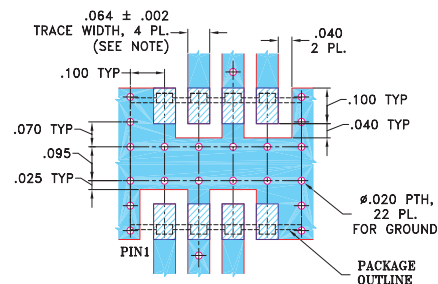
Outline Drawing



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)



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

Directional Coupler Electrical Specifications

FREQ. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS (dB)						DIRECTIVITY (dB)						VSWR (:1)	POWER INPUT, W	
	$f_{\text{L}}\text{--}f_{\text{U}}$	Nom.	Max. Flatness	L Typ.	M Typ.	U Typ.	L Max.	M Typ.	U Typ.	L Typ.	M Typ.	U Typ.	L Max.	MU 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

