

Surface Mount Directional Coupler

50Ω 5 to 750 MHz

JDC-10-2+
JDC-10-2



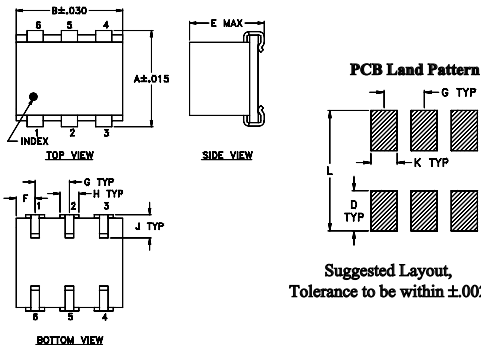
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C

Pin Connections

INPUT	1
OUTPUT	6
COUPLED	3
GROUND	2,5
ISOLATE (DO NOT USE)	4

Outline Drawing

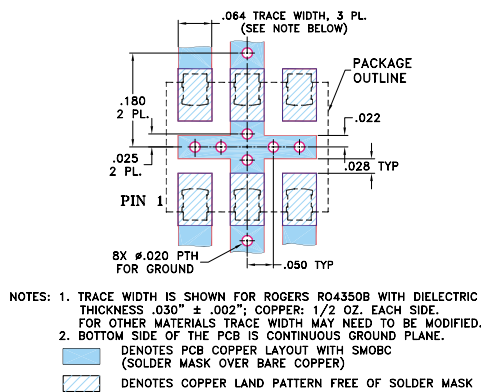


Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.280	.310	--	.100	.225	.055	.100
7.11	7.87	--	2.54	5.72	1.40	2.54

H	J	K	L	wt
.047	.065	.065	.300	grams
1.19	1.65	1.65	7.62	0.45

Demo Board MCL P/N: TB-185 Suggested PCB Layout (PL-046)



Features

- wideband, 5 to 750 MHz
- low mainline loss, 1.0 dB typ.
- high directivity, 20 dB typ.
- good VSWR, 1.13 typ.
- excellent solderability

Applications

- communications
- VHF/UHF

CASE STYLE: BH292
PRICE: \$13.60 ea. QTY (25-49)

+ 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.

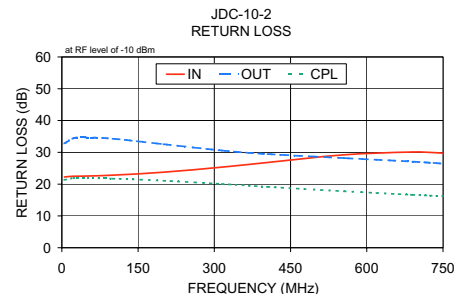
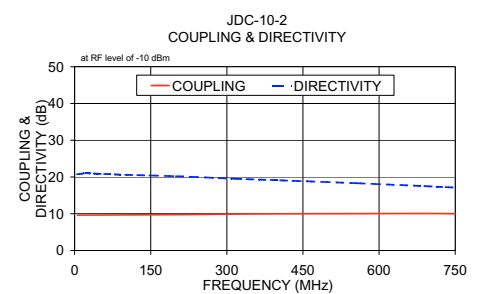
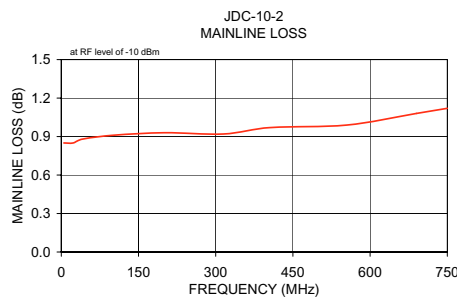
Directional Coupler Electrical Specifications

FREQ. (MHz)	COUPLING (dB)		MAINLINE LOSS 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.				
5-750	10.0±0.5	±0.6	1.0	1.5	1.0	1.5	1.0	1.5	20	15	20	17	20	16	1.13	1.0	1.0	

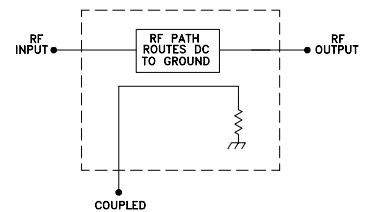
L = 5-50 MHz M = 50-375 MHz U = 375-750 MHz
1. Mainline loss includes theoretical power loss at coupled port.

Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)		Return Loss (dB)	
			In	Out	Out	Cpl
5.00	0.85	9.64	20.74	22.23	32.79	21.36
23.00	0.85	9.66	21.03	22.49	34.45	21.91
41.00	0.88	9.65	20.93	22.53	34.69	21.90
100.00	0.91	9.69	20.61	22.82	34.29	21.73
200.00	0.93	9.77	20.21	23.77	32.59	21.09
315.00	0.92	9.91	19.55	25.35	30.59	20.08
405.00	0.97	9.98	19.10	26.82	29.48	19.17
555.00	0.99	10.02	18.32	29.22	28.21	17.76
690.00	1.08	10.06	17.53	30.09	27.10	16.66
750.00	1.12	10.01	17.13	29.75	26.46	16.22



electrical schematic



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