

Surface Mount Directional Coupler

50Ω 5 to 750 MHz

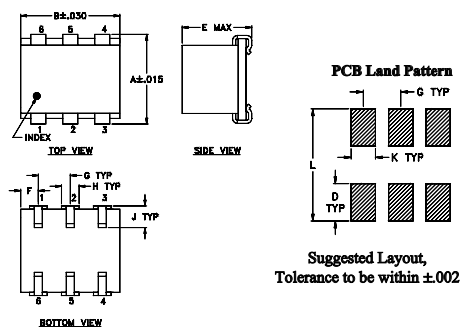
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Permanent damage may occur if any of these limits are exceeded.	

Pin Connections

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

Outline Drawing

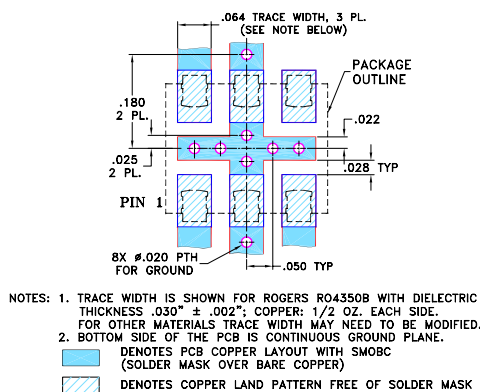


Outline Dimensions (inch mm)

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

JDC-10-2+
JDC-10-2



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

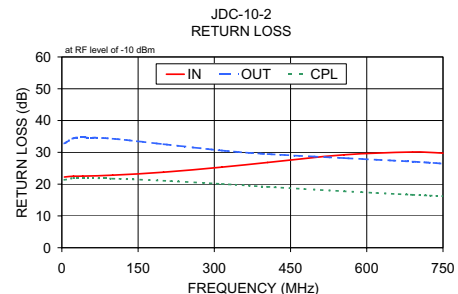
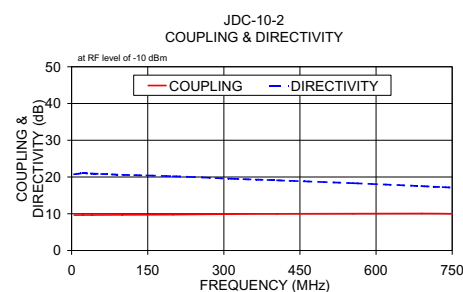
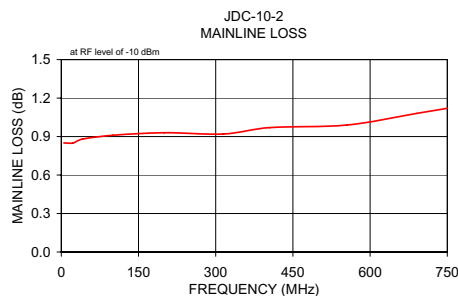
FREQ. (MHz)	COUPLING (dB)		MAINLINE LOSS ¹ (dB)						DIRECTIVITY (dB)						VSWR (:1)	POWER INPUT, W			
			L		M		U		L		M		U						
	f _L -f _U	Norm.	Flatness	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Min.	Max.
5-750	10.0±0.5	±0.6	1.0	1.5	1.0	1.5	1.0	1.5	20	15	20	17	20	16	1.13	1.0	1.0	1.0	1.0

L = 5-50 MHz M = 50-375 MHz U = 375-750 MHz

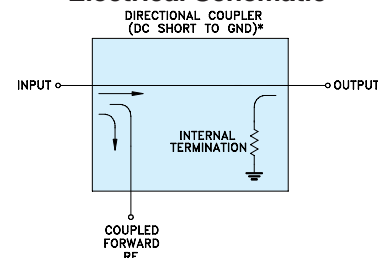
1. Mainline loss includes theoretical power loss at coupled port.

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



* ELECTRICAL SCHEMATIC IS FOR DIRECTIONAL
COUPLER WITH INTERNAL TRANSFORMER(S) THAT
ROUTES DC FROM RF PORTS TO GROUND.

For detailed performance specs
& shopping online see web site

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I/F/R/F MICROWAVE COMPONENTS

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