

Directional Coupler

SCDC-11-2

50Ω

500 to 1100 MHz

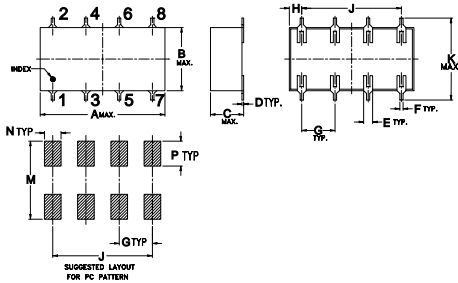
Maximum Ratings

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

Pin Connections

INPUT	1
OUTPUT	2
COUPLED	5
NOT USED (ISOLATE)	3,6
GROUND	4,7,8

Outline Drawing

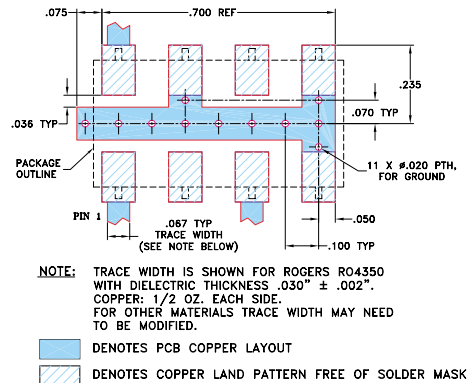


Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
0.75	0.38	0.28	0.01	0.05	0.02	0.2
19.05	9.65	7.11	0.25	1.27	0.51	5.08

H	J	K	M	N	P	wt
0.075	0.6	0.45	0.47	0.1	0.15	grams
1.91	15.24	11.43	11.94	2.54	3.81	1.60

Demo Board MCL P/N: TB-35 Suggested PCB Layout (PL-096)



Features

- low insertion loss, 1.1 dB typ.
- high directivity, 20 dB typ.
- excellent solderability

Applications

- communications
- cellular



CASE STYLE: YY161
PRICE: \$11.95 ea. QTY (10-49)

Directional Coupler Electrical Specifications

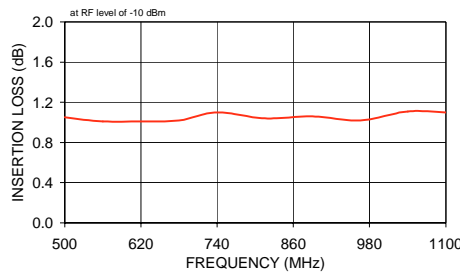
FREQ. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS ¹ (dB)		DIRECTIVITY (dB)		VSWR (:1)	POWER INPUT, W
f_L - f_U	Nom.	Flatness	Typ. Max.		Typ. Min.		Typ.	Max.
500-1100	11.3±0.5	±0.6	1.1	1.8	17	10	1.4	2

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

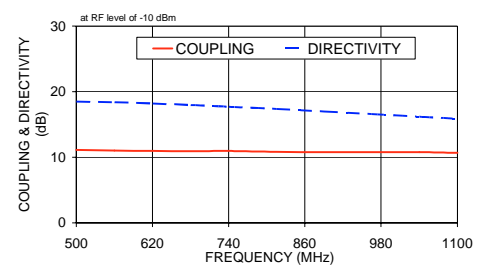
Typical Performance Data

Frequency (MHz)	Insertion Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
				In	Out	Cpl
500.00	1.05	11.09	18.51	27.31	28.87	25.33
560.00	1.01	11.02	18.38	28.98	31.53	27.85
620.00	1.01	10.96	18.20	27.86	28.16	28.56
680.00	1.02	10.92	17.97	25.86	24.69	27.35
740.00	1.10	10.96	17.70	24.17	22.15	25.73
815.00	1.04	10.83	17.36	22.57	19.92	24.01
890.00	1.06	10.78	16.99	21.50	18.29	22.80
965.00	1.02	10.78	16.58	20.76	17.06	21.98
1040.00	1.11	10.78	16.18	20.30	16.11	21.48
1100.00	1.10	10.66	15.86	20.10	15.49	21.26

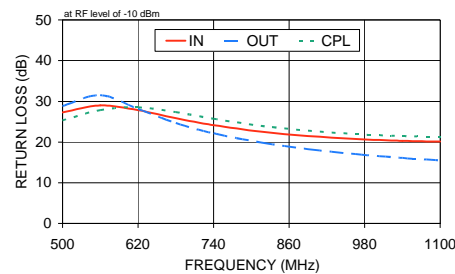
SCDC-11-2 INSERTION LOSS



SCDC-11-2 COUPLING & DIRECTIVITY



SCDC-11-2 RETURN LOSS



electrical schematic

