

2 Way-0° 50Ω 10 to 1000 MHz

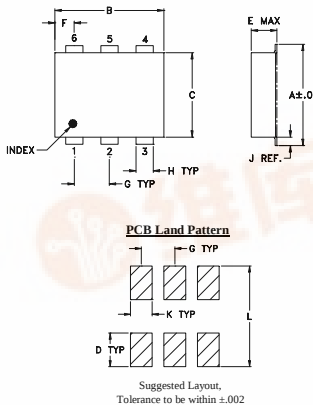
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.125W max.

Pin Connections

SUM PORT	1
PORT 1	3
PORT 2	4
GROUND	6
Externally connect together & isolate	2,5

Outline Drawing

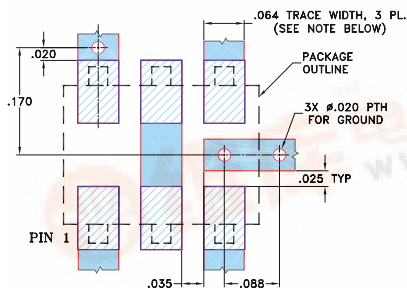


Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.272	.310	.220	.100	.162	.055	.100
6.91	7.87	5.59	2.54	4.11	1.40	2.54

H	J	K	L	wt
.030	.026	.065	.300	grams
0.76	0.66	1.65	7.62	0.25

Demo Board MCL P/N: TB-208 Suggested PCB Layout (PL-116)



NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .030" ± .002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

- low insertion loss, 0.4 dB typ.
- excellent amplitude unbalance, 0.10 dB typ.
- very good phase unbalance, 0.5 deg. typ.
- aqueous washable
- protected under U.S. Patent 6,133,525

Applications

- instrumentation
- cellular

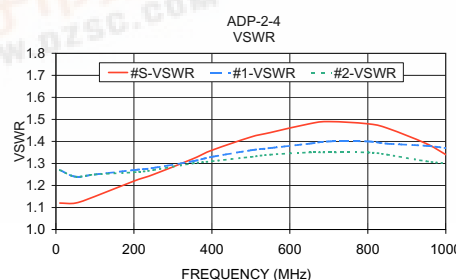
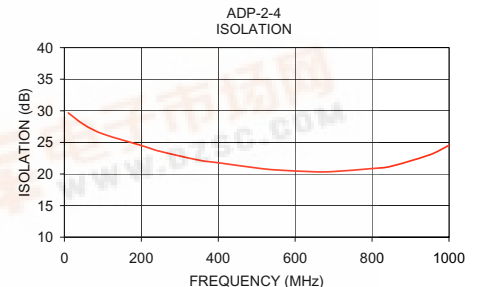
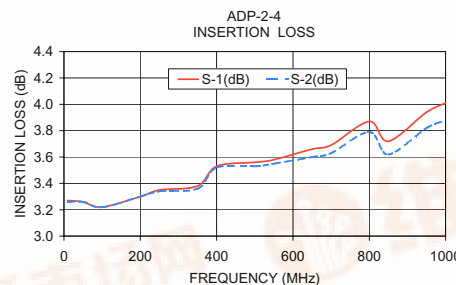
Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)			INSERTION LOSS (dB) ABOVE 3.0 dB			PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L	M	U	L	M	U	L	M	U	L	M	U
f _c -f _u	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.
10-1000	25	20	23	16	19	14	0.3	0.5	0.4	0.9	0.8	1.5

L = 10-100 MHz M = 100-500 MHz U = 500-1000 MHz

Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2					
10.00	3.27	3.26	0.01	29.66	0.03	1.12	1.27
50.00	3.26	3.26	0.00	27.85	0.05	1.12	1.24
100.00	3.22	3.22	0.00	26.35	0.13	1.15	1.25
200.00	3.30	3.30	0.00	24.51	0.21	1.22	1.27
250.00	3.35	3.34	0.01	23.57	0.21	1.25	1.28
350.00	3.38	3.36	0.02	22.19	0.32	1.32	1.31
400.00	3.53	3.52	0.01	21.78	0.36	1.36	1.33
500.00	3.56	3.53	0.03	20.95	0.44	1.42	1.36
550.00	3.58	3.55	0.03	20.65	0.50	1.44	1.37
650.00	3.66	3.60	0.05	20.35	0.54	1.48	1.39
700.00	3.69	3.63	0.07	20.39	0.62	1.49	1.40
800.00	3.87	3.79	0.08	20.86	0.70	1.48	1.40
850.00	3.72	3.62	0.10	21.23	0.76	1.46	1.39
950.00	3.94	3.82	0.12	23.04	0.78	1.39	1.38
1000.00	4.01	3.88	0.13	24.55	0.90	1.34	1.37



electrical schematic

