

Surface Mount

# Power Splitter/Combiner

BP2P

2 Way-0° 50Ω 1710 to 1990 MHz



## Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-65°C to 150°C
Power Input (as a splitter)	1.5W max.
Internal Dissipation	0.75W max.

Permanent damage may occur if any of these limits are exceeded.

## Pin Connections

SUM PORT	2
PORT 1	8
PORT 2	5
GROUND	1,3,4,6,7

## Features

- low insertion loss, 0.7 dB typ.
- high isolation, 30 dB typ.
- excellent repeatability
- low profile
- aqueous washable

CASE STYLE: XX211  
PRICE: \$1.24 ea. QTY. (25)

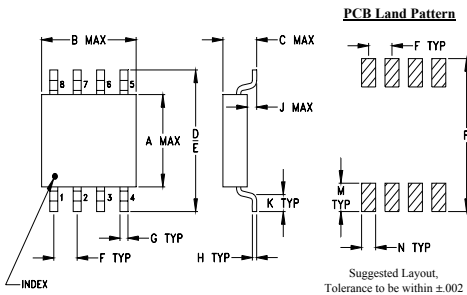
## Applications

- PCS/DCS
- communication systems

## Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 3.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
	Typ.	Min.	Typ.	Max.	Max.	Max.
$f_L$ - $f_U$						
1710-1990	30	18	0.7	1.0	3.0	0.2

## Outline Drawing



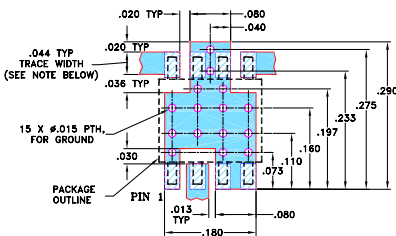
## Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.163	.210	.077	.250	.220	.050	.017
4.14	5.33	1.96	6.35	5.59	1.27	0.43

H	J	K	M	N	P	wt
.009	.025	.030	.050	.030	.270	grams
0.23	0.64	0.76	1.27	0.76	6.86	0.10

## Demo Board MCL P/N: TB-37 Suggested PCB Layout (PL-053)

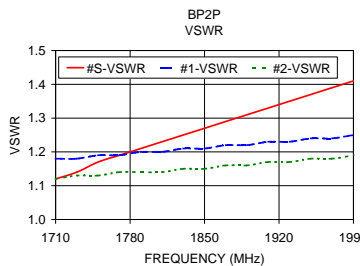
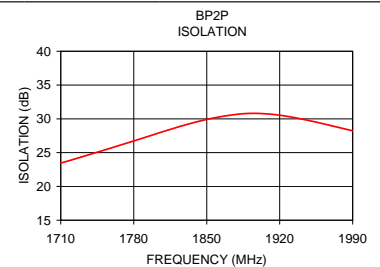
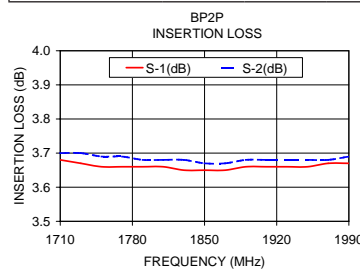


- NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS R04350B WITH DIELECTRIC THICKNESS 0.020" ± 0.0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.  
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
- DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
1710.00	3.68	3.70	0.03	23.45	0.21	1.12	1.18	1.12
1730.00	3.67	3.70	0.03	24.36	0.22	1.14	1.18	1.13
1750.00	3.66	3.69	0.03	25.30	0.22	1.17	1.19	1.13
1770.00	3.66	3.69	0.03	26.25	0.23	1.19	1.19	1.14
1790.00	3.66	3.68	0.02	27.22	0.23	1.21	1.20	1.14
1810.00	3.66	3.68	0.02	28.20	0.24	1.23	1.20	1.14
1830.00	3.65	3.68	0.02	29.13	0.26	1.25	1.21	1.15
1850.00	3.65	3.67	0.02	29.91	0.28	1.27	1.21	1.15
1870.00	3.65	3.67	0.02	30.49	0.29	1.29	1.22	1.16
1890.00	3.66	3.68	0.02	30.80	0.29	1.31	1.22	1.16
1910.00	3.66	3.68	0.02	30.71	0.31	1.33	1.23	1.17
1930.00	3.66	3.68	0.02	30.30	0.31	1.35	1.23	1.17
1950.00	3.66	3.68	0.02	29.68	0.33	1.37	1.24	1.18
1970.00	3.67	3.68	0.02	28.97	0.36	1.39	1.24	1.18
1990.00	3.67	3.69	0.02	28.23	0.37	1.41	1.25	1.19



## electrical schematic



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