

Surface Mount

# Power Splitter/Combiner

BP2C

2 Way-0° 50Ω 810 to 960 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, 0.6 dB typ.
- high isolation, 23 dB typ.
- excellent power handling, 1.5W
- low profile
- aqueous washable

CASE STYLE: XX211  
PRICE: \$1.29 ea. QTY. (25)

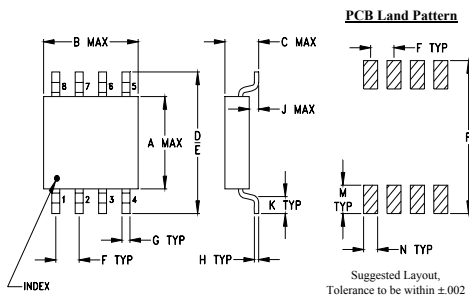
## Applications

- cellular
- GSM
- PDC
- CDMA

## 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.
$f_L-f_U$	25	18	0.6	0.9	3.0	0.2

## Outline Drawing



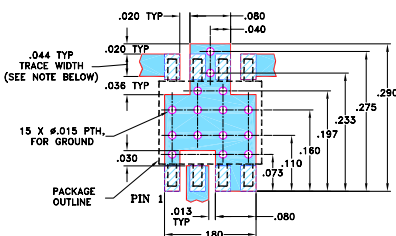
## Outline Dimensions (inch/mm)

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)

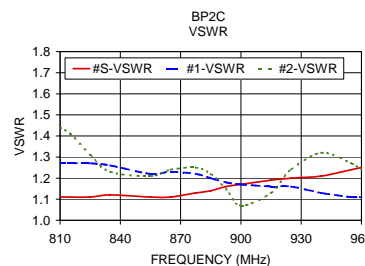
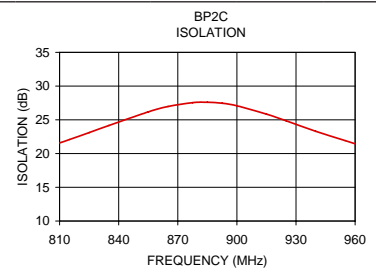
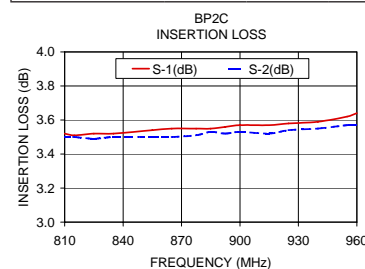


- NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS R04350B WITH DIELECTRIC THICKNESS 0.020" ± 0.0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.  
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

- 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						
810.00	3.52	3.50	0.02	21.58	0.19	1.11	1.27	1.44
815.00	3.51	3.50	0.01	22.08	0.23	1.11	1.27	1.41
825.00	3.52	3.49	0.03	23.10	0.22	1.11	1.27	1.31
835.00	3.52	3.50	0.02	24.17	0.34	1.12	1.26	1.23
855.00	3.54	3.50	0.04	26.18	0.19	1.11	1.22	1.21
865.00	3.55	3.50	0.05	26.97	0.04	1.11	1.23	1.24
877.50	3.55	3.51	0.05	27.55	0.20	1.13	1.22	1.25
885.00	3.55	3.53	0.03	27.61	0.23	1.14	1.20	1.22
892.50	3.56	3.52	0.04	27.45	0.29	1.16	1.18	1.15
900.00	3.57	3.53	0.04	27.08	0.13	1.17	1.17	1.07
915.00	3.57	3.52	0.06	25.85	0.18	1.19	1.16	1.13
925.00	3.58	3.54	0.05	24.85	0.26	1.20	1.16	1.24
940.00	3.59	3.55	0.05	23.30	0.24	1.21	1.13	1.32
955.00	3.62	3.57	0.05	21.91	0.19	1.24	1.11	1.27
960.00	3.64	3.57	0.07	21.46	0.25	1.25	1.11	1.24



## electrical schematic



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