

# Surface Mount Power Splitter/Combiner

## BP4C+ BP4C

4 Way-0° 50Ω

810 to 960 MHz



CASE STYLE: XX211  
PRICE: \$1.99 ea. QTY (25)

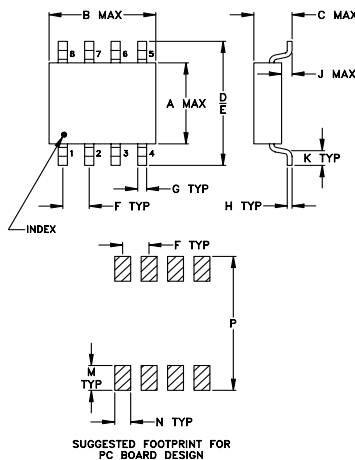
### Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-65°C to 150°C
Power Input (as a splitter)	1.5W max.
Internal Dissipation	0.375W max.

### Pin Connections

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

### Outline Drawing



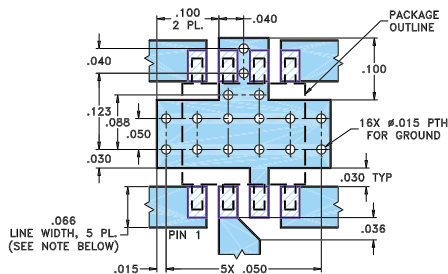
### Outline Dimensions (inch/mm)

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-231 Suggested PCB Layout (PL-113)



- NOTE:**
- TRACE WIDTH IS SHOWN FOR ROGERS R04350 WITH DIELECTRIC THICKNESS .030" ± .002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
  - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

- DENOTES PCB COPPER LAYOUT
- DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

### Features

- excellent isolation, 25 dB typ.
- excellent VSWR, 1.3:1 typ.
- umplitude unbalance, 0.6dB max.
- aqueous washable

### Applications

- cellular
- communications systems
- instrumentation

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

See our web site for RoHS Compliance methodologies and qualifications.

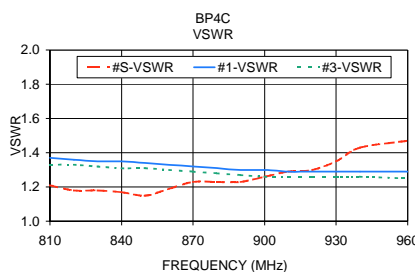
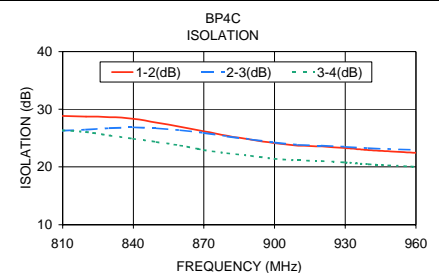
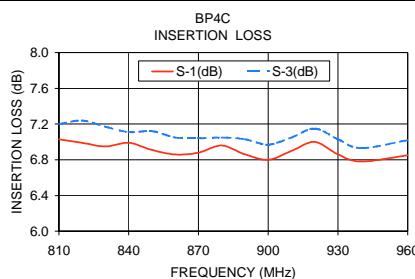
### Splitter Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 6 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)	VSWR (:1) Typ.	
	Typ.	Min.	Typ.	Max.			Ports 1,2,3,4	Ports S
$f_L$ - $f_U$					Max.	Max.		
810-960	25	19*	1.0	1.6	8	0.6	1.25	1.35

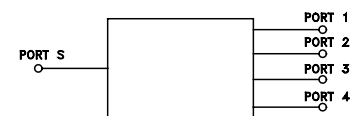
\*18 dB min. above 900 MHz.

### Typical Performance Data

Freq. (MHz)	Insertion Loss (dB)				Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR				
	S-1	S-2	S-3	S-4		1-2	2-3	3-4		S	1	2	3	4
810.00	7.03	7.30	7.20	6.88	0.42	28.81	26.28	26.34	4.86	1.21	1.37	1.36	1.33	1.29
820.00	6.99	7.35	7.24	6.84	0.51	28.74	26.46	26.04	4.76	1.18	1.36	1.35	1.33	1.29
830.00	6.95	7.25	7.17	6.77	0.48	28.64	26.73	25.44	4.68	1.18	1.35	1.34	1.32	1.29
840.00	6.99	7.21	7.11	6.78	0.44	28.36	26.85	24.86	4.91	1.17	1.35	1.34	1.31	1.28
850.00	6.91	7.21	7.12	6.72	0.49	27.68	26.70	24.32	5.20	1.15	1.34	1.33	1.31	1.27
860.00	6.86	7.16	7.05	6.71	0.45	26.97	26.35	23.71	5.18	1.19	1.33	1.32	1.30	1.26
870.00	6.88	7.14	7.04	6.73	0.41	26.18	25.91	22.92	5.03	1.23	1.32	1.31	1.29	1.25
880.00	6.96	7.17	7.05	6.83	0.34	25.36	25.29	22.36	5.25	1.23	1.31	1.31	1.28	1.24
890.00	6.86	7.14	7.03	6.74	0.41	24.73	24.75	21.92	5.01	1.23	1.30	1.30	1.27	1.23
900.00	6.80	7.08	6.97	6.67	0.41	24.13	24.22	21.40	4.93	1.26	1.30	1.29	1.26	1.23
910.00	6.90	7.16	7.05	6.75	0.41	23.70	23.81	21.13	4.88	1.29	1.29	1.29	1.26	1.22
920.00	7.00	7.27	7.15	6.84	0.44	23.54	23.69	21.00	4.96	1.30	1.29	1.28	1.26	1.22
930.00	6.86	7.14	7.03	6.71	0.43	23.28	23.48	20.77	5.17	1.35	1.29	1.28	1.26	1.21
940.00	6.78	7.04	6.93	6.64	0.40	22.92	23.23	20.47	5.08	1.43	1.29	1.29	1.26	1.22
960.00	6.85	7.11	7.02	6.70	0.42	22.43	22.94	20.02	4.99	1.47	1.29	1.28	1.25	1.21



### electrical schematic



### ESD Rating

Human Body Model (HBM): Class 1A (250 v to <500 v) in accordance with ANSI/ESD STM 5.1 - 2001  
Machine Model (MM): Class M1 (<100 v) in accordance with ANSI/ESD STM 5.2 - 1999

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