

Surface Mount Power Splitter/Combiner

BP4C

4 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	0.375W max.

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

Pin Connections

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

Features

- excellent isolation, 25 dB typ.
- excellent output VSWR, 1.25:1 typ.
- amplitude unbalance, 0.6 dB max.
- aqueous washable

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

Applications

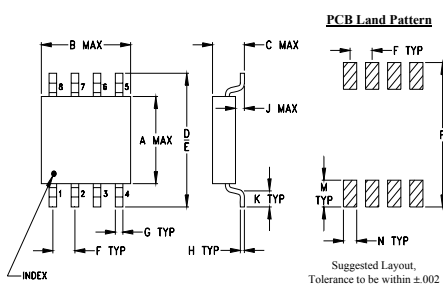
- cellular
- communications systems
- instrumentation

Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 6.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)	VSWR (:1) Typ.	
	Typ.	Min.	Typ.	Max.	Max.	Max.	Ports S	Ports 1,2,3,4
f_L - f_U								
810-960	25	19'	1.0	1.6	8	0.6	1.35	1.25

1. 18 dB min. above 900 MHz.

Outline Drawing



Outline Dimensions (inch/mm)

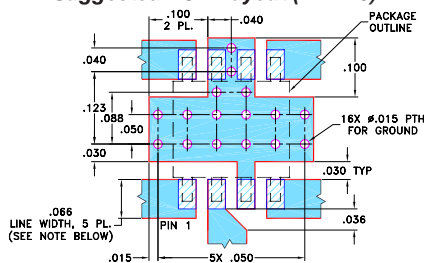
A	B	C	D	E	F	G
.163	.210	.077	.250	.220	.050	.017
4.14	5.33	1.96	6.35	5.59	1.27	0.43

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

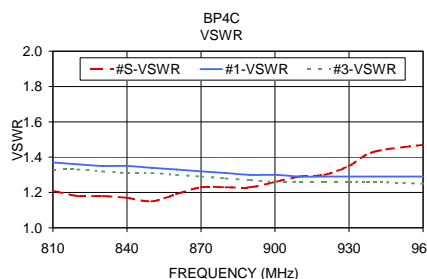
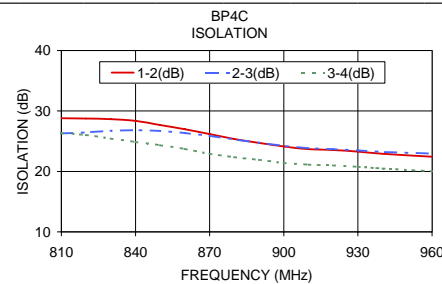
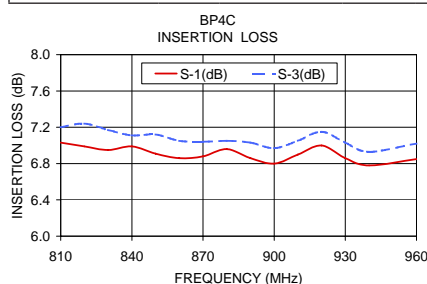
Typical Performance Data

Freq. (MHz)	Insertion Loss (dB)				Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 2	VSWR 3	VSWR 4
	S-1	S-2	S-3	S-4		1-2	2-3	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

Demo Board MCL P/N: TB-231 Suggested PCB Layout (PL-113)



- NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS 0.030" ± 0.002"; 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.
3. DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
4. DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK



electrical schematic



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