

Surface Mount Power Splitter/Combiner

BP4C1+

4 Way-0° 50Ω 750 to 1200 MHz



Maximum Ratings

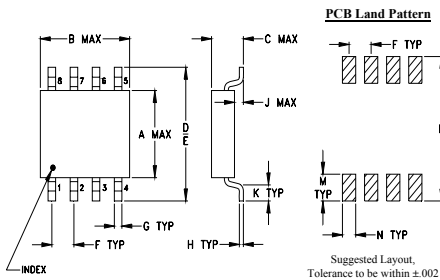
Operating Temperature	-40°C to 85°C
Storage Temperature	-65°C to 150°C
Power Input (as a splitter)	1.5W max.
Internal Dissipation	0.375W max.

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

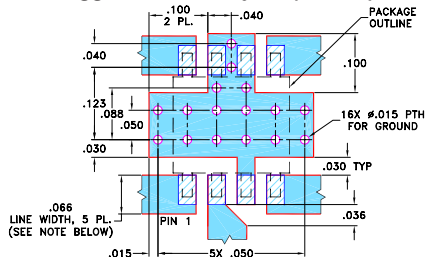
Outline Drawing



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)



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

Features

- excellent isolation, 20 dB typ.
- excellent output VSWR, 1.25:1 typ.
- good power handling, 1.5W as splitter
- aqueous washable

Applications

- cellular
- communications systems
- instrumentation

CASE STYLE: XX211
PRICE: \$1.49 ea. QTY (25)

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

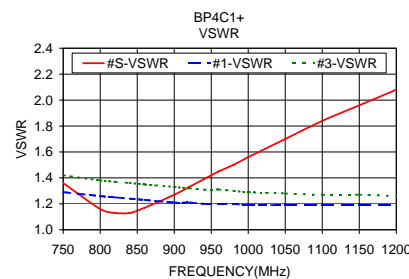
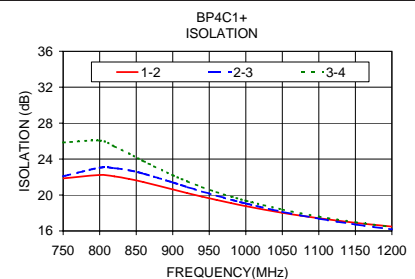
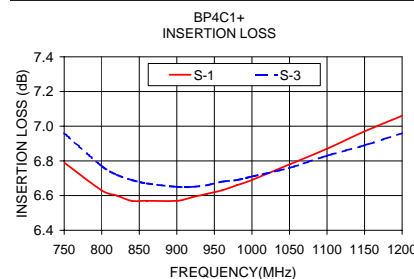
The + suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

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.			Port S	Ports 1,2,3,4
f_L - f_U					Max.	Max.		
750-1200	20	13	0.7	1.4	14	0.6	1.5	1.25

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
750.00	6.79	6.98	6.96	6.98	0.19	21.85	22.09	25.85	1.62	1.36	1.29	1.42	1.42	1.34
800.00	6.63	6.79	6.77	6.79	0.16	22.23	23.04	26.06	2.29	1.16	1.26	1.39	1.38	1.31
820.00	6.60	6.74	6.72	6.75	0.15	22.07	22.99	25.42	2.57	1.13	1.25	1.37	1.37	1.29
840.00	6.57	6.71	6.69	6.72	0.14	21.79	22.75	24.62	2.97	1.13	1.24	1.36	1.36	1.28
860.00	6.57	6.69	6.67	6.70	0.14	21.44	22.38	23.77	3.38	1.17	1.23	1.35	1.35	1.27
900.00	6.57	6.68	6.65	6.69	0.12	20.62	21.40	22.20	4.16	1.27	1.21	1.33	1.33	1.25
920.00	6.59	6.68	6.65	6.70	0.11	20.21	20.89	21.52	4.54	1.33	1.21	1.33	1.32	1.24
940.00	6.61	6.69	6.66	6.71	0.10	19.82	20.39	20.89	4.93	1.39	1.20	1.32	1.31	1.24
960.00	6.63	6.70	6.68	6.72	0.09	19.45	19.93	20.33	5.31	1.45	1.20	1.31	1.31	1.23
980.00	6.66	6.72	6.69	6.74	0.08	19.10	19.48	19.83	5.68	1.50	1.20	1.31	1.30	1.23
1000.00	6.69	6.74	6.71	6.76	0.07	18.76	19.06	19.36	6.05	1.56	1.19	1.30	1.29	1.22
1050.00	6.78	6.80	6.76	6.83	0.06	18.02	18.13	18.39	6.97	1.70	1.19	1.29	1.28	1.22
1100.00	6.87	6.86	6.83	6.90	0.07	17.42	17.37	17.61	7.87	1.84	1.19	1.28	1.27	1.22
1150.00	6.97	6.93	6.89	6.97	0.08	16.91	16.72	16.98	8.75	1.96	1.19	1.28	1.27	1.22
1200.00	7.06	7.00	6.96	7.05	0.11	16.49	16.17	16.44	9.62	2.08	1.19	1.28	1.26	1.22



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 (pass 50V)

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