

Surface Mount

Power Splitter/Combiner

4 Way-0° 50Ω

750 to 1200 MHz

BP4C1+



CASE STYLE: XX211

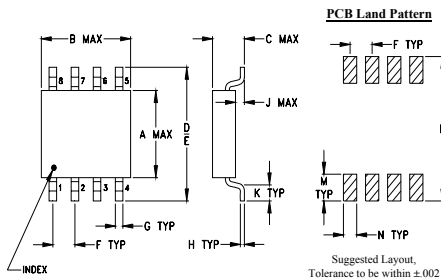
Maximum Ratings

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

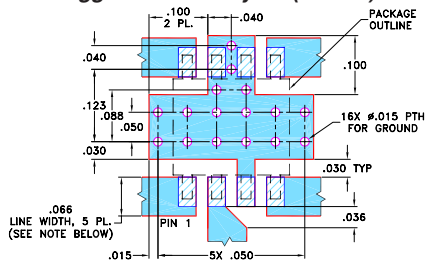


Outline Dimensions (inch/mm)

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.
3. DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
4. 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

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications



Available Tape and Reel at no extra cost

Reel Size	Devices/Reel
7"	20, 50, 100, 200, 500, 1000

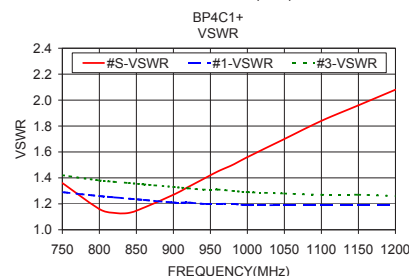
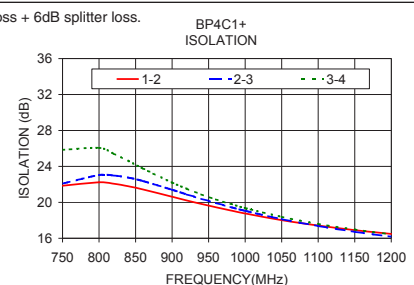
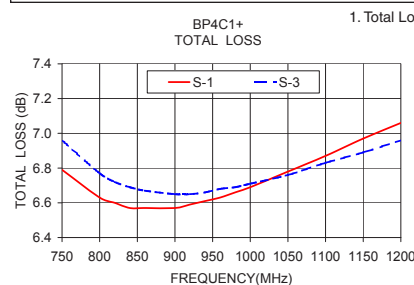
Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)	INSERTION LOSS (dB) ABOVE 6 dB*	PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)	VSWR (:1) Typ.
f_L - f_U	Typ. Min.	Typ. Max.	Max.	Max.	Port S Ports 1,2,3,4
750-1200	20 13	0.7 1.4	14	0.6	1.5 1.25

* 1.7 dB over 750-800 MHz.

Typical Performance Data

Freq. (MHz)	Total Loss ¹ (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)

Notes

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
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