

Power Splitter/Combiner

BP2C1+

2 Way-0° 50Ω 650 to 1100 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, 0.4 dB typ.
- high isolation, 20 dB typ.
- excellent output VSWR, 1.25:1 typ.
- excellent power handling, 1.5W
- excellent repeatability
- low profile
- aqueous washable

Applications

- cellular
- GSM
- PDC
- CDMA

CASE STYLE: XX211
PRICE: \$0.96 ea. QTY. (25)

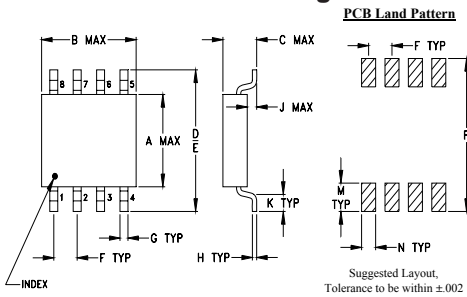
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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 3.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)	VSWR (:1)	
	Typ.	Min.	Typ.	Max.			S-Port Typ.	Output-Ports Typ.
f_L - f_U					Max.	Max.		
650-1100	20	10	0.4	1.2	3.0	0.2	1.35	1.25

Outline Drawing



Outline Dimensions (inch/mm)

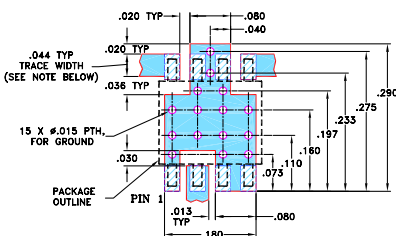
A	B	C	D	E	F	G
.163	.210	.077	.250	.220	.050	.017
4.14	5.33	1.96	6.35	5.59	1.27	0.43

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 at 25°C

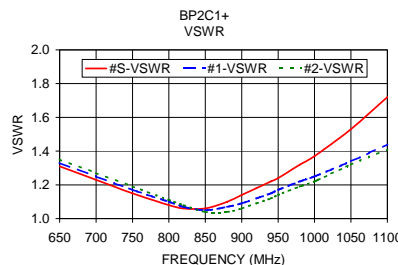
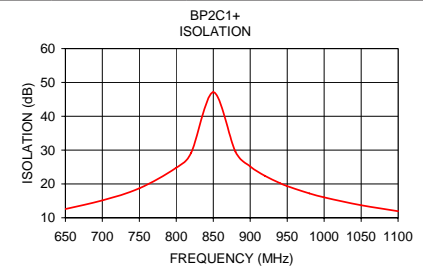
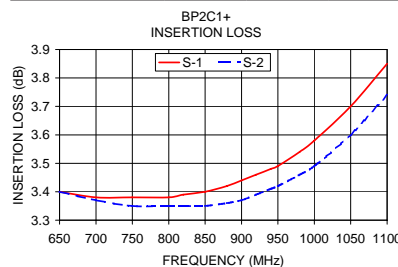
Frequency (MHz)	Insertion Loss (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
650.00	3.40	3.40	0.00	12.60	0.51	1.31	1.33	1.35
700.00	3.38	3.37	0.01	15.11	0.51	1.23	1.25	1.27
750.00	3.38	3.35	0.02	18.71	0.53	1.15	1.17	1.19
800.00	3.38	3.35	0.03	24.78	0.57	1.08	1.10	1.11
820.00	3.39	3.35	0.04	29.19	0.58	1.06	1.07	1.08
850.00	3.40	3.35	0.05	47.12	0.60	1.06	1.05	1.04
880.00	3.42	3.36	0.06	29.54	0.62	1.10	1.07	1.04
900.00	3.44	3.37	0.06	25.19	0.62	1.14	1.09	1.06
920.00	3.46	3.39	0.07	22.35	0.63	1.18	1.12	1.09
940.00	3.48	3.41	0.07	20.24	0.65	1.22	1.15	1.12
950.00	3.49	3.42	0.07	19.36	0.66	1.24	1.17	1.14
980.00	3.54	3.46	0.08	17.19	0.68	1.32	1.22	1.19
1000.00	3.58	3.49	0.08	16.03	0.69	1.37	1.25	1.22
1050.00	3.70	3.60	0.10	13.71	0.71	1.53	1.34	1.32
1100.00	3.85	3.74	0.11	11.94	0.72	1.72	1.44	1.41

Demo Board MCL P/N: TB-37 Suggested PCB Layout (PL-053)



- NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B 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



electrical schematic



ESD Rating

Human Body Model (HBM): Class 0 (< 250V) in accordance with ANSI/ESD STM 5.1 - 2001
Machine Model (MM): Class M2 (100V to < 250V) in accordance with ANSI/ESD STM 5.2 - 1999 (pass 50V)



For detailed performance specs & shopping online see web site

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IF/RF MICROWAVE COMPONENTS

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuit's standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp.

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