Surface Mount

Power Splitter/Combiner

2 Way-0° 50Ω 1420 to 1660 MHz

BP2G+

CASE STYLE: XX211
PRICE: $0.96 ea. QTY. (20)

+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

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

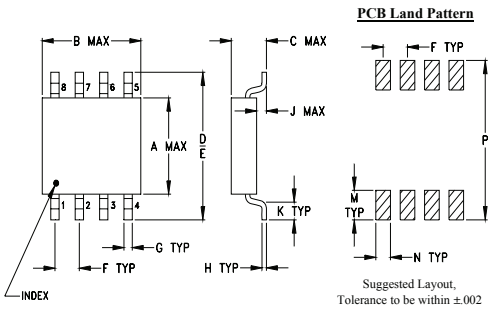
Features

- low insertion loss, 0.4 dB typ.
- high isolation, 28 dB typ.
- good output VSWR, 1.15:1 typ.
- good input VSWR, 1.2:1 typ.
- excellent power handling, 1.5W
- low profile, 0.077"

Applications

- GPS
- PDC
- mobile satellite
- defense & aeronautical

Outline Drawing

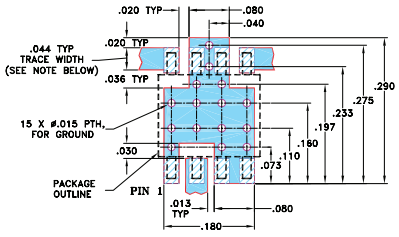


Outline Dimensions (inch / mm)

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-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 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.	Max.	Max.	S-Port Typ.	Output Ports Typ.
1420-1660	28	20	0.6	1.0	3.0	0.2	1.15	1.15

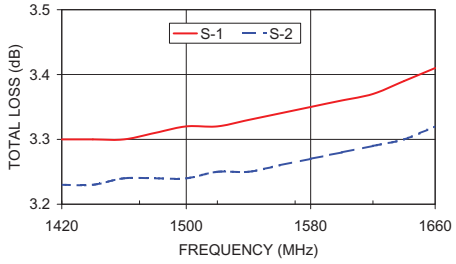
* 17 dB over 1420-1500 MHz

Typical Performance Data at 25°C

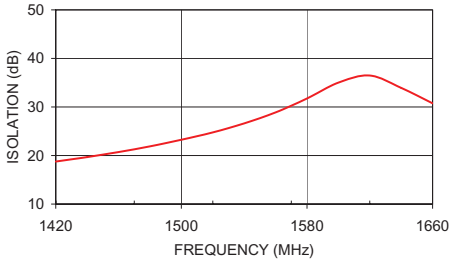
Frequency (MHz)	Total Loss[1] (dB) S-1	Total Loss[1] (dB) S-2	Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
1420.00	3.30	3.23	0.07	18.76	0.46	1.09	1.18	1.17
1440.00	3.30	3.23	0.07	19.68	0.47	1.08	1.17	1.16
1460.00	3.30	3.24	0.06	20.71	0.51	1.08	1.16	1.15
1480.00	3.31	3.24	0.07	21.88	0.52	1.08	1.16	1.15
1500.00	3.32	3.24	0.08	23.24	0.54	1.09	1.16	1.14
1520.00	3.32	3.25	0.07	24.76	0.55	1.11	1.16	1.14
1540.00	3.33	3.25	0.08	26.62	0.59	1.13	1.16	1.14
1560.00	3.34	3.26	0.08	28.87	0.60	1.15	1.17	1.15
1580.00	3.35	3.27	0.08	31.75	0.64	1.17	1.18	1.16
1600.00	3.36	3.28	0.08	35.01	0.66	1.20	1.20	1.17
1620.00	3.37	3.29	0.08	36.48	0.68	1.23	1.21	1.18
1640.00	3.39	3.30	0.09	33.93	0.71	1.25	1.23	1.20
1660.00	3.41	3.32	0.09	30.75	0.74	1.28	1.25	1.22

1. Total Loss = Insertion Loss + 3dB splitter loss.

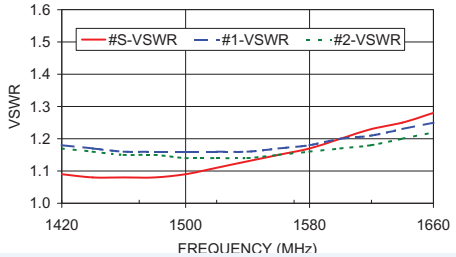
TOTAL LOSS



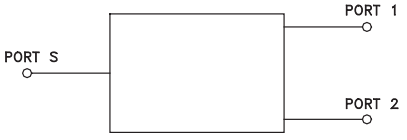
ISOLATION



VSWR



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.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
C. The parts covered by this specification document are subject to Mini-Circuits 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-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

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