

Surface Mount

Power Splitter/Combiner

BP2U+

2 Way-0° 50Ω 2100 to 2500 MHz



Generic photo used for illustration purposes only

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	0.75W max.

Pin Connections

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

Features

- low insertion loss, 0.5 dB typ.
- good isolation, 30 dB typ.
- excellent VSWR, 1.10:1 typ.
- excellent power handling, 1.5W
- low profile
- aqueous washable

Applications

- blue tooth
- IEEE 802.11b, g

+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
13" 2000

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.
2100-2500	30	17.5	0.5	0.8	2.0	0.2	1.10	1.10

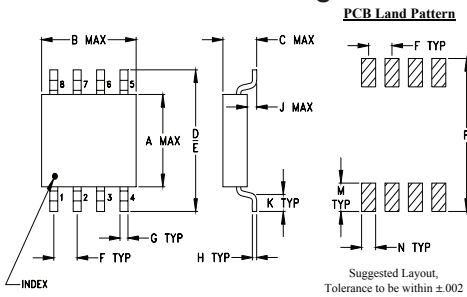
*16.5 over 2100-2150 MHz

Typical Performance Data at 25°C

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
2100.00	3.43	3.35	0.08	20.75	0.41	1.06	1.19	1.22
2130.00	3.44	3.36	0.08	22.09	0.40	1.04	1.16	1.19
2170.00	3.45	3.36	0.09	24.25	0.41	1.02	1.13	1.16
2190.00	3.45	3.36	0.09	25.58	0.41	1.02	1.11	1.14
2220.00	3.46	3.37	0.09	28.05	0.40	1.02	1.09	1.12
2240.00	3.46	3.37	0.10	30.06	0.39	1.03	1.08	1.10
2270.00	3.47	3.37	0.10	34.12	0.37	1.05	1.06	1.09
2290.00	3.48	3.37	0.10	38.10	0.34	1.07	1.06	1.08
2320.00	3.48	3.38	0.11	40.95	0.32	1.09	1.05	1.07
2340.00	3.49	3.38	0.11	36.83	0.32	1.10	1.06	1.07
2380.00	3.51	3.39	0.11	30.95	0.33	1.13	1.08	1.08
2420.00	3.52	3.40	0.12	27.16	0.31	1.16	1.11	1.11
2460.00	3.54	3.42	0.12	24.56	0.28	1.19	1.15	1.14
2480.00	3.55	3.43	0.13	23.63	0.27	1.21	1.17	1.16
2500.00	3.56	3.43	0.13	22.75	0.23	1.23	1.19	1.17

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

Outline Drawing

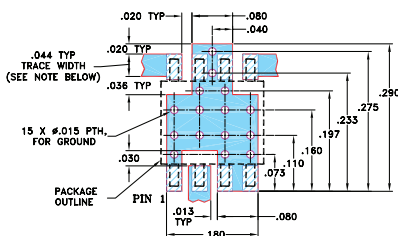


Outline Dimensions (inch/mm)

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

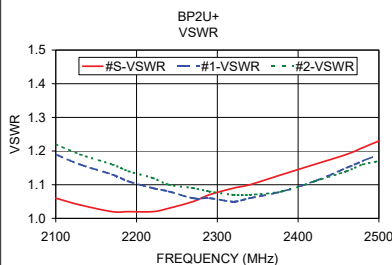
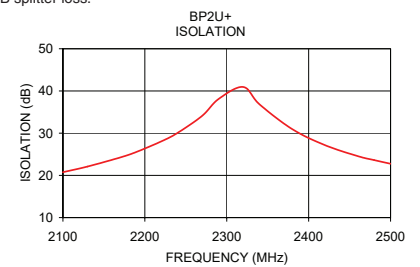
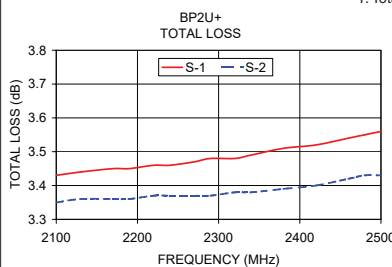
H	J	K	M	N	P	wt
.009	.025	.030	.050	.030	.270	grams
0.23	0.64	0.76	1.27	0.76	6.86	0.10

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

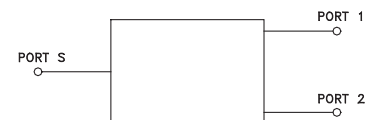


- NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS 0.020" ± 0.0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

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



electrical 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



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Signal Conditioning](#) category:

Click to view products by [Mini-Circuits](#) manufacturer:

Other Similar products are found below :

[MAPDCC0001](#) [MAPDCC0004](#) [PD0409J5050S2HF](#) [880157](#) [HHS-109-PIN](#) [DC1417J5005AHF](#) [AFS14A30-2185.00-T3](#) [AFS14A35-1591.50-T3](#) [DS-323-PIN](#) [B39321R801H210](#) [1A0220-3](#) [JP510S](#) [LFB212G45SG8C341](#) [LFB322G45SN1A504](#) [LFL182G45TC3B746](#) [SF2159E](#) [30057](#)
[FM-104-PIN](#) [CER0813B](#) [MAPDCC0005](#) [3A325](#) [40287](#) [41180](#) [ATB3225-75032NCT](#) [BD0810N50100AHF](#) [BD2425J50200AHF](#)
[C5060J5003AHF](#) [JHS-115-PIN](#) [JP503AS](#) [DC0710J5005AHF](#) [DC2327J5005AHF](#) [DC3338J5005AHF](#) [43020](#) [LFB2H2G60BB1C106](#)
[LFL15869MTC1B787](#) [X3C19F1-20S](#) [XC3500P-20S](#) [10013-20](#) [SF2194E](#) [CDBLB455KCAX39-B0](#) [TGL2208-SM, EVAL](#) [RF1353C](#)
[PD0922J5050D2HF](#) [1E1305-3](#) [1G1304-30](#) [B0922J7575AHF](#) [2020-6622-20](#) [TP-102-PIN](#) [TP-103-PIN](#) [BD1222J50200AHF](#)