

Surface Mount

Power Splitter/Combiner

2 Way-0° 50Ω 1710 to 1990 MHz

BP2P+



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

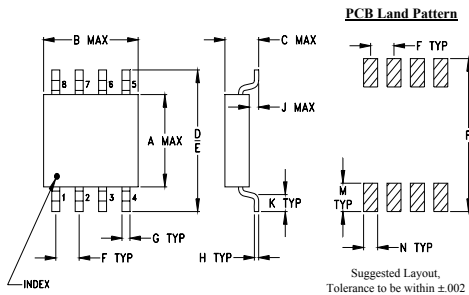
Applications

- PCS/DCS
- GSM
- WCDMA

Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 3.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)	VSWR (:1)	
f_L - f_U	Typ.	Min.	Typ.	Max.	Max.	Max.	S-Port Typ.	Output-Ports Typ.
1710-1990	30	18	0.5	1.0	3.0	0.2	1.15	1.11

Outline Drawing

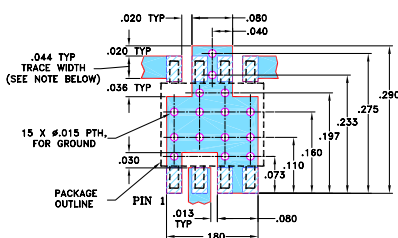


Outline Dimensions (inch/mm)

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)



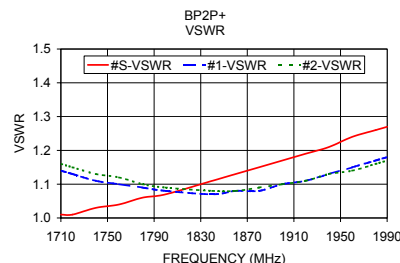
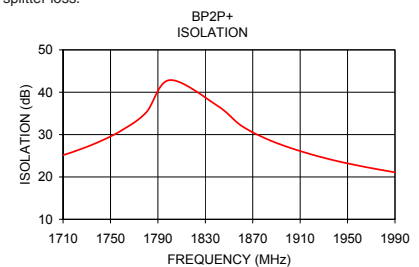
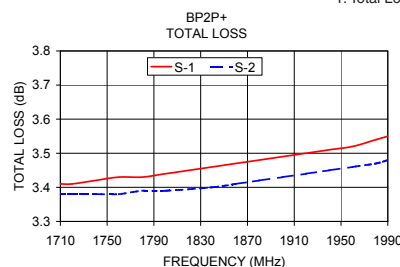
- NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .0020" ± 0.0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

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

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						
1710.00	3.41	3.38	0.04	25.17	0.01	1.01	1.14	1.16
1720.00	3.41	3.38	0.04	26.08	0.02	1.01	1.13	1.15
1740.00	3.42	3.38	0.04	28.25	0.03	1.03	1.11	1.13
1760.00	3.43	3.38	0.04	31.09	0.05	1.04	1.10	1.12
1780.00	3.43	3.39	0.04	35.20	0.05	1.06	1.09	1.10
1800.00	3.44	3.39	0.05	42.86	0.05	1.07	1.08	1.09
1840.00	3.46	3.40	0.05	36.84	0.07	1.11	1.07	1.08
1860.00	3.47	3.41	0.06	32.18	0.08	1.13	1.08	1.08
1880.00	3.48	3.42	0.06	29.19	0.09	1.15	1.08	1.09
1900.00	3.49	3.43	0.06	27.01	0.10	1.17	1.10	1.10
1920.00	3.50	3.44	0.06	25.28	0.11	1.19	1.11	1.11
1940.00	3.51	3.45	0.07	23.83	0.11	1.21	1.13	1.13
1960.00	3.52	3.46	0.07	22.62	0.12	1.24	1.15	1.14
1980.00	3.54	3.47	0.07	21.57	0.15	1.26	1.17	1.16
1990.00	3.55	3.48	0.07	21.10	0.16	1.27	1.18	1.17

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



electrical schematic



ESD Rating

Human Body Model (HBM): Class 0 (<250V) in accordance with ANSI/ESD STM 5.1 - 2001
Machine Model (MM): Class M1 (<100V) 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.
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