

Surface Mount

Power Splitter/Combiner

2 Way-0° 50Ω 1200 to 1600 MHz

SBA-2-14+
SBA-2-14


CASE STYLE: SM1

PRICE: \$8.95 ea. QTY. (10-49)

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

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

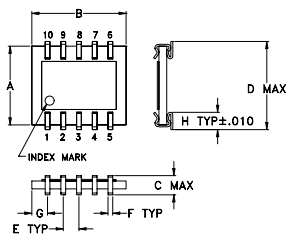
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	2W max.
Internal Dissipation	0.125W max.
Permanent damage may occur if any of these limits are exceeded.	

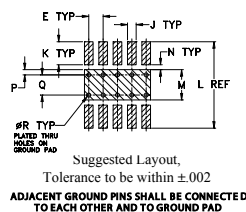
Pin Connections

SUM PORT	3
PORT 1	10
PORT 2	6
GROUND	1,2,4,5,7,8,9

Outline Drawing



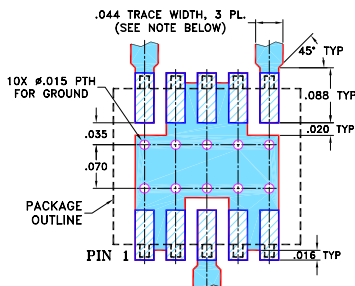
PCB Land Pattern



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	
.250	.300	.070	.290	.050	.015	.050	.060	
6.35	7.62	1.78	7.37	1.27	0.38	1.27	1.52	
J	K	L	M	N	P	Q	R	wt
.030	.080	.300	.100	.020	.015	.070	.014	grams
0.76	2.03	7.62	2.54	0.51	0.38	1.78	0.36	0.3

Demo Board MCL P/N: TB-95 Suggested PCB Layout (PL-070)



NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .020" ± .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

Features

- low insertion loss, 0.6 dB typ.
- minimal temperature variation
- very low amplitude unbalance, 0.25 dB typ.
- solder plated leads for excellent solderability and strain relief
- aqueous washable
- protected by U.S. Patent, 5,534,830

Applications

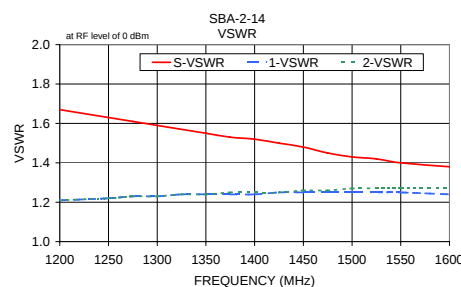
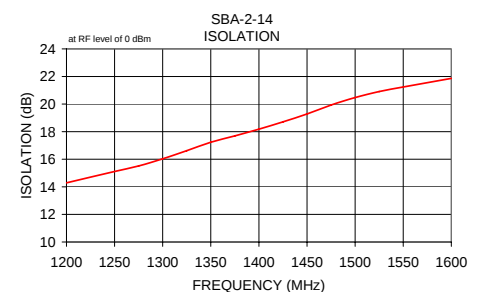
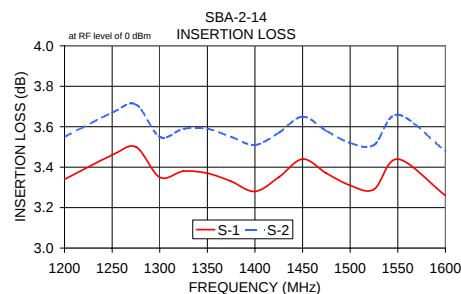
- GPS

Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 3.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
f_L - f_U	Typ.	Min	Typ.	Max.	Max.	Max.
1200-1600	16	10	0.6	1.0	5.0	0.5

Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
1200	3.34	3.55	0.20	14.29	2.17	1.67	1.21	1.21
1250	3.46	3.67	0.21	15.11	2.19	1.63	1.22	1.22
1275	3.50	3.71	0.21	15.51	2.33	1.61	1.23	1.23
1300	3.35	3.55	0.21	16.03	2.48	1.59	1.23	1.23
1325	3.38	3.59	0.20	16.62	2.47	1.57	1.24	1.24
1350	3.37	3.59	0.21	17.23	2.33	1.55	1.24	1.24
1375	3.33	3.55	0.22	17.69	2.46	1.53	1.24	1.25
1400	3.28	3.51	0.23	18.18	2.69	1.52	1.24	1.25
1425	3.35	3.57	0.22	18.71	2.71	1.50	1.25	1.25
1450	3.44	3.65	0.21	19.28	2.78	1.48	1.25	1.26
1475	3.37	3.58	0.21	19.93	2.73	1.45	1.25	1.26
1500	3.31	3.52	0.22	20.47	2.84	1.43	1.25	1.27
1525	3.29	3.51	0.22	20.91	2.92	1.42	1.25	1.27
1550	3.44	3.66	0.22	21.24	3.01	1.40	1.25	1.27
1600	3.26	3.48	0.22	21.86	3.13	1.38	1.24	1.27



electrical schematic



Mini-Circuits®
 ISO 9001 ISO 14001 AS 9100 CERTIFIED
 IF/RF MICROWAVE COMPONENTS

For detailed performance specs
& shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

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