

Surface Mount Power Splitter/Combiner

SBA-2-14

2 Way-0° 50Ω

1200 to 1600 MHz

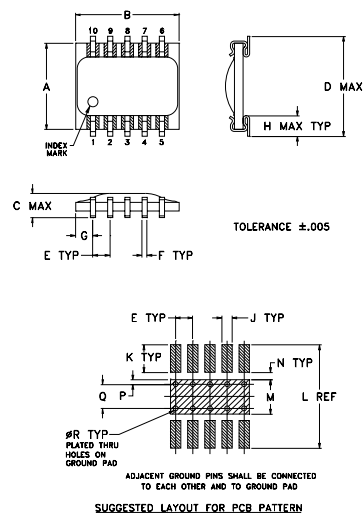
Maximum Ratings

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.

Pin Connections

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

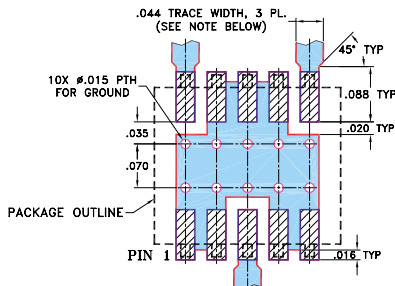
Outline Drawing



Outline Dimensions (inch)

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)



NOTE: 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.

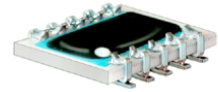
■ DENOTES PCB COPPER LAYOUT
■ DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

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
- protected by US Patent, 5,534,830

Applications

- GPS



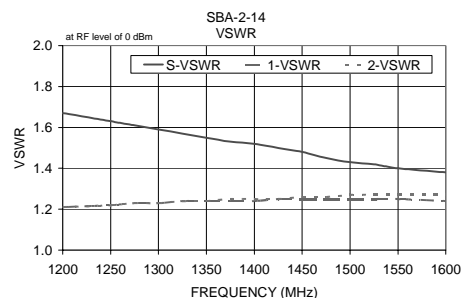
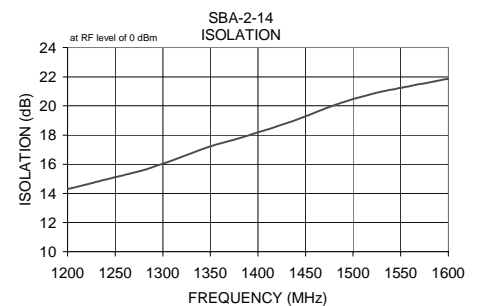
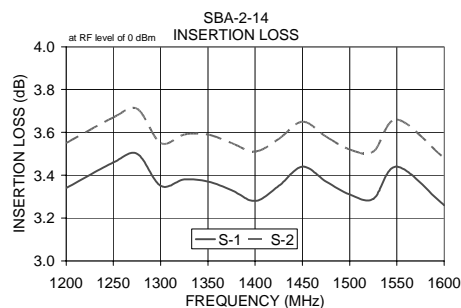
CASE STYLE: SM1
PRICE: \$8.95 ea. QTY (10-49)

Splitter 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) S-1	Insertion Loss (dB) S-2	Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
1200.00	3.34	3.55	0.20	14.29	2.17	1.67	1.21	1.21
1250.00	3.46	3.67	0.21	15.11	2.19	1.63	1.22	1.22
1275.00	3.50	3.71	0.21	15.51	2.33	1.61	1.23	1.23
1300.00	3.35	3.55	0.21	16.03	2.48	1.59	1.23	1.23
1325.00	3.38	3.59	0.20	16.62	2.47	1.57	1.24	1.24
1350.00	3.37	3.59	0.21	17.23	2.33	1.55	1.24	1.24
1375.00	3.33	3.55	0.22	17.69	2.46	1.53	1.24	1.25
1400.00	3.28	3.51	0.23	18.18	2.69	1.52	1.24	1.25
1425.00	3.35	3.57	0.22	18.71	2.71	1.50	1.25	1.25
1450.00	3.44	3.65	0.21	19.28	2.78	1.48	1.25	1.26
1475.00	3.37	3.58	0.21	19.93	2.73	1.45	1.25	1.26
1500.00	3.31	3.52	0.22	20.47	2.84	1.43	1.25	1.27
1525.00	3.29	3.51	0.22	20.91	2.92	1.42	1.25	1.27
1550.00	3.44	3.66	0.22	21.24	3.01	1.40	1.25	1.27
1600.00	3.26	3.48	0.22	21.86	3.13	1.38	1.24	1.27



electrical schematic

