

Surface Mount

Power Splitter/Combiner

2 Way-0° 50Ω 2000 to 2600 MHz

SBA-2-22+ SBA-2-22



CASE STYLE: SM2
PRICE: \$6.95 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.

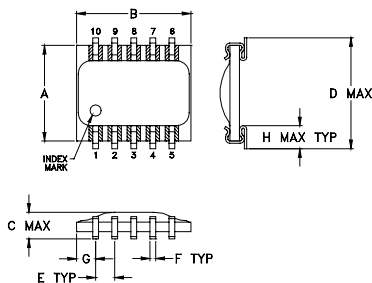
Maximum Ratings

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.	

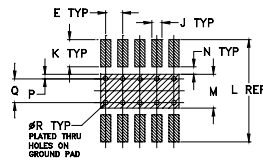
Pin Connections

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

Outline Drawing



PCB Land Pattern

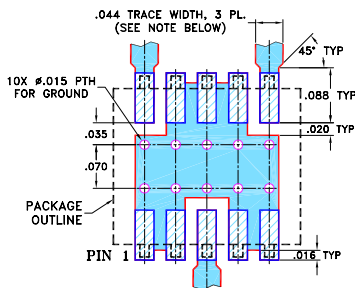


Suggested Layout.
Tolerance to be within ±.002
ADJACENT GROUND PINS SHALL BE CONNECTED
TO EACH OTHER AND TO GROUND PAD

Outline Dimensions (inch)

A	B	C	D	E	F	G	H	
.250	.300	.095	.290	.050	.015	.050	.060	
6.35	7.62	2.41	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.
3. DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
4. DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

- low profile, 0.07" height
- low insertion loss, 0.8 dB typ.
- excellent amplitude unbalance, 0.3 dB typ.
- solder plated leads for excellent solderability and strain relief
- aqueous washable
- protected by U.S. Patent, 5,534,830

Applications

- PCS

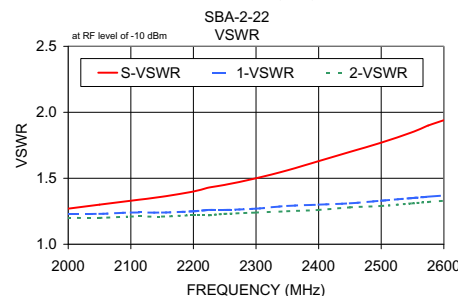
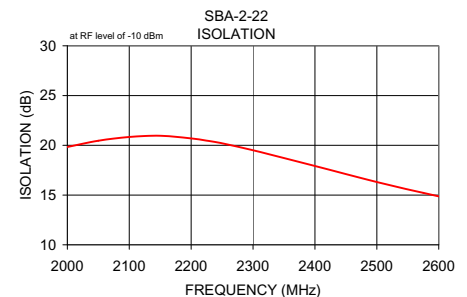
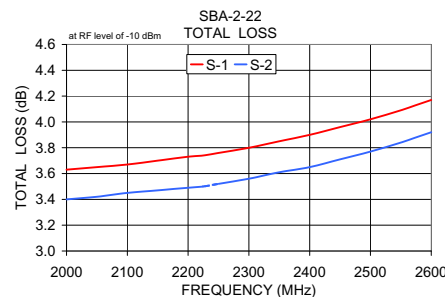
Electrical Specifications

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.
2000-2600	18	10	0.8	1.6	10	0.8

Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
2000.00	3.63	3.40	0.23	19.83	1.68	1.27	1.23	1.20
2050.00	3.65	3.42	0.23	20.46	1.76	1.30	1.23	1.20
2100.00	3.67	3.45	0.23	20.84	1.80	1.33	1.24	1.21
2150.00	3.70	3.47	0.23	20.96	1.76	1.36	1.24	1.21
2200.00	3.73	3.49	0.24	20.69	1.79	1.40	1.25	1.22
2225.00	3.74	3.50	0.24	20.47	1.83	1.43	1.26	1.22
2250.00	3.76	3.52	0.24	20.20	1.85	1.45	1.26	1.23
2300.00	3.80	3.56	0.24	19.50	1.90	1.50	1.27	1.24
2350.00	3.85	3.61	0.24	18.72	1.95	1.56	1.29	1.25
2400.00	3.90	3.65	0.25	17.92	1.99	1.63	1.30	1.26
2450.00	3.96	3.71	0.25	17.11	2.05	1.70	1.31	1.28
2500.00	4.02	3.77	0.25	16.31	2.12	1.77	1.33	1.29
2550.00	4.09	3.84	0.25	15.57	2.17	1.85	1.35	1.31
2575.00	4.13	3.88	0.25	15.22	2.22	1.90	1.36	1.32
2600.00	4.17	3.92	0.24	14.87	2.26	1.94	1.37	1.33

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



electrical schematic



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