

Surface Mount

Power Splitter/Combiner

2 Way-0°

50Ω

200 to 900 MHz

ADP-2-9+

Maximum Ratings

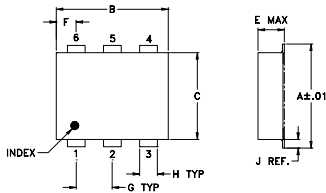
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	0.5W max.
Internal Dissipation	0.125W max.

Permanent damage may occur if any of these limits are exceeded.

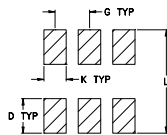
Pin Connections

SUM PORT	1
PORT 1	3
PORT 2	4
GROUND	6
Externally connect together & isolate	2,5

Outline Drawing



PCB Land Pattern

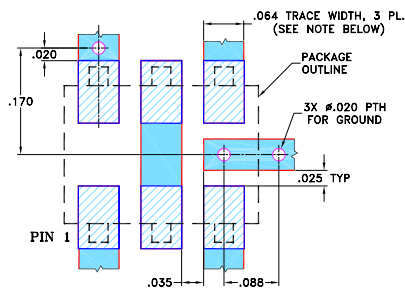


Suggested Layout,
Tolerance to be within ±0.002

Outline Dimensions (inch mm)

A	B	C	D	E	F	G	
.272	.310	.220	.100	.162	.055	.100	
6.91	7.87	5.59	2.54	4.11	1.40	2.54	
H	J	K	L				wt
.030	.026	.065	.300				grams
0.76	0.66	1.65	7.62				0.25

Demo Board MCL P/N: TB-208 Suggested PCB Layout (PL-116)



NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .030" ± .002"; 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

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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Features

- low insertion loss, 0.4 dB typ.
- excellent amplitude unbalance, 0.05 dB typ.
- very good phase unbalance, 0.3 deg. typ.
- aqueous washable
- protected under U.S. Patent 6,133,525

Applications

- VHF/UHF receivers/transmitters
- cellular

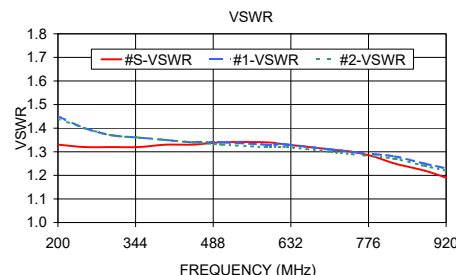
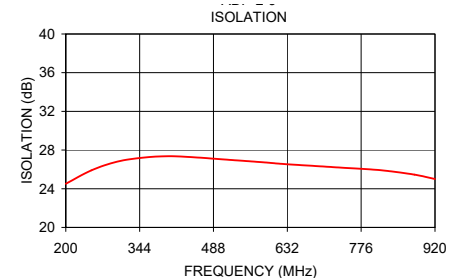
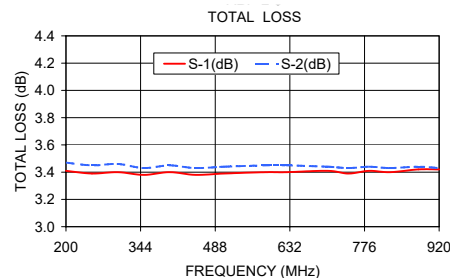
Electrical Specifications

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.
200-900	27	20	0.4	0.8	2.0	0.3

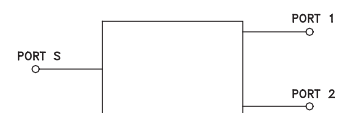
Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
200.00	3.41	3.47	0.06	24.51	0.17	1.33	1.45	1.44
250.00	3.39	3.45	0.06	25.90	0.15	1.32	1.40	1.40
300.00	3.40	3.46	0.06	26.80	0.16	1.32	1.37	1.37
350.00	3.38	3.43	0.06	27.21	0.17	1.32	1.36	1.36
400.00	3.40	3.45	0.06	27.36	0.16	1.33	1.35	1.35
450.00	3.38	3.43	0.05	27.25	0.17	1.33	1.34	1.34
505.00	3.39	3.44	0.05	27.04	0.18	1.34	1.34	1.33
585.00	3.40	3.45	0.05	26.73	0.23	1.34	1.33	1.32
625.00	3.40	3.45	0.05	26.56	0.20	1.33	1.33	1.32
705.00	3.41	3.44	0.03	26.29	0.24	1.31	1.31	1.30
745.00	3.39	3.43	0.04	26.15	0.23	1.30	1.30	1.29
785.00	3.41	3.44	0.03	26.03	0.23	1.28	1.29	1.28
825.00	3.40	3.43	0.03	25.85	0.26	1.25	1.28	1.27
880.00	3.42	3.44	0.02	25.46	0.22	1.22	1.25	1.24
920.00	3.42	3.43	0.01	25.01	0.21	1.19	1.23	1.22

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



electrical schematic



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