

Surface Mount Power Splitter/Combiner

LRPS-2-4+ LRPS-2-4

2 Way-0° 50Ω 10 to 1000 MHz



Maximum Ratings

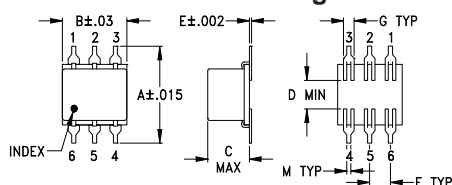
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.125W max.

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

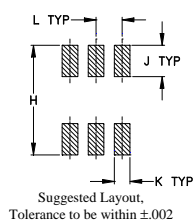
Pin Connections

SUM PORT	6
PORT 1	4
PORT 2	3
GROUND	1
NOT USED	2,5

Outline Drawing



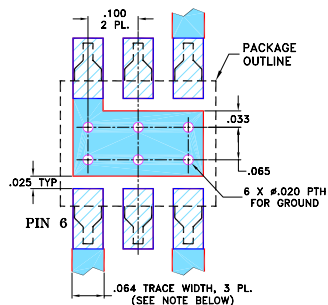
PCB Land Pattern



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.400	.31	.200	.10	.010	.100	.050
10.16	7.87	5.08	2.54	0.25	2.54	1.27
H	J	K	L	M		wt
.420	.120	.060	.100	.020		grams
10.67	3.05	1.52	2.54	0.51		0.55

Demo Board MCL P/N: TB-94 Suggested PCB Layout (PL-236)



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

Features

- low insertion loss, 0.4 dB typ.
- high isolation, 23 dB typ.

Applications

- cellular
- instrumentation
- communications systems

CASE STYLE: QQQ130
PRICE: \$19.95 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.

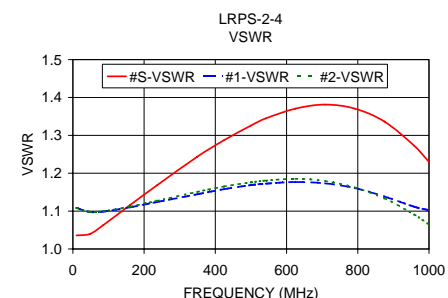
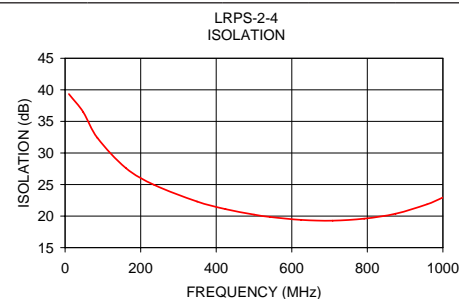
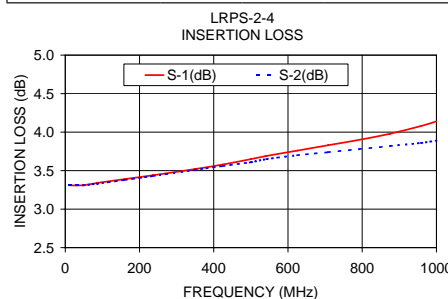
Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 3.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U	L	M	U
$f_c - f_u$	Typ.	Min	Typ.	Min	Typ.	Min	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
10-1000	25	20	23	16	19	14	0.3	0.5	0.4	0.9	0.8	1.5	1.0	3.0	5.0	0.15	0.2	0.4

L = 10-100 MHz M = 100-500 MHz U = 500-1000 MHz

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						
10.00	3.31	3.31	0.00	39.33	0.01	1.04	1.11	1.11
47.69	3.31	3.31	0.00	36.50	0.16	1.04	1.10	1.10
85.38	3.34	3.33	0.00	32.39	0.27	1.06	1.10	1.10
160.77	3.39	3.38	0.00	27.60	0.51	1.12	1.11	1.11
236.15	3.44	3.43	0.01	24.93	0.73	1.17	1.12	1.13
349.23	3.52	3.51	0.01	22.30	1.04	1.24	1.14	1.15
424.62	3.58	3.56	0.02	21.10	1.22	1.29	1.16	1.16
500.00	3.65	3.61	0.03	20.23	1.39	1.33	1.17	1.18
541.67	3.69	3.65	0.04	19.87	1.47	1.34	1.17	1.18
625.00	3.76	3.70	0.06	19.39	1.62	1.37	1.18	1.19
708.33	3.83	3.74	0.09	19.28	1.76	1.38	1.17	1.18
791.67	3.90	3.78	0.12	19.59	1.82	1.37	1.16	1.16
875.00	3.98	3.82	0.16	20.38	1.86	1.34	1.14	1.13
958.33	4.08	3.86	0.22	21.87	1.88	1.27	1.11	1.09
1000.00	4.14	3.89	0.25	22.95	1.88	1.23	1.10	1.07



electrical schematic



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IF/RF MICROWAVE COMPONENTS

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Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp.

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