

Surface Mount

Power Splitter/Combiner

2 Way-0°

75Ω

2 to 500 MHz

LRPS-2-1-75+ LRPS-2-1-75



CASE STYLE: QQQ130

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

Maximum Ratings

Operating Temperature -40°C to 85°C

Storage Temperature -55°C to 100°C

Power Input (as a splitter) 1W max.

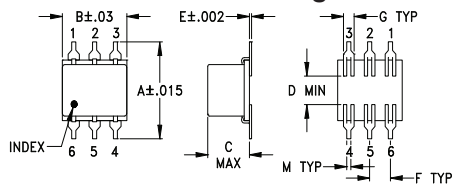
Internal Dissipation 0.125W max.

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

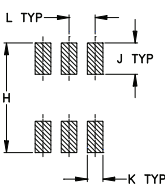
Pin Connections

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

Outline Drawing



PCB Land Pattern

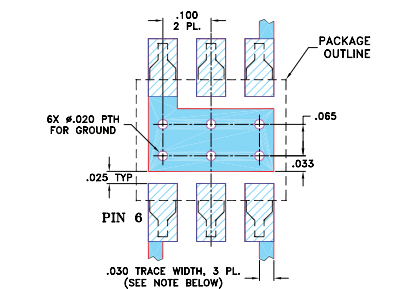
Suggested Layout,
Tolerance to be within ±0.002

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-221 Suggested PCB Layout (PL-235)



- 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

- insertion loss 0.35 dB typ.
- high isolation, 35 dB typ.

Applications

- VHF/UHF
- catv
- communications systems

Electrical Specifications

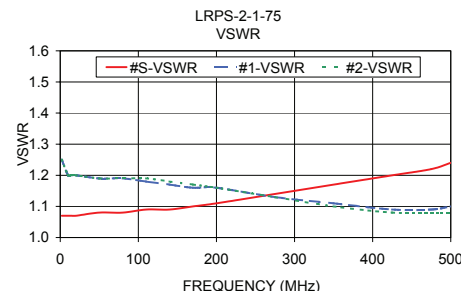
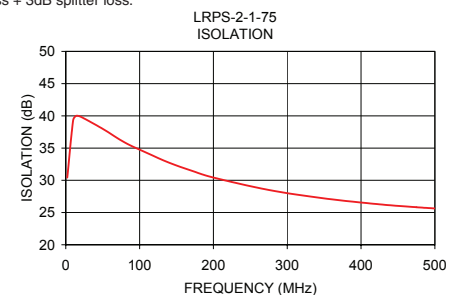
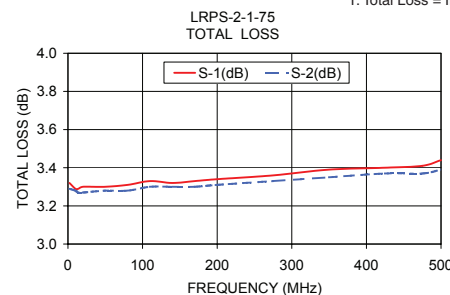
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 3.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L			L		
f_L - f_U	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
2-500	35	18	35	25	27	20	0.3	0.8	0.35	0.6	0.5	1.0	1.0	2.0	3.0	0.15	0.2	0.3

L = 2-20 MHz M = 20-250 MHz U = 250-500 MHz

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						
2.00	3.32	3.29	0.03	30.42	0.05	1.07	1.25	1.25
10.00	3.29	3.28	0.01	39.35	0.00	1.07	1.20	1.20
14.00	3.29	3.27	0.03	39.99	0.01	1.07	1.20	1.20
20.00	3.30	3.27	0.02	39.87	0.05	1.07	1.20	1.20
50.00	3.30	3.28	0.02	37.98	0.01	1.08	1.19	1.19
80.00	3.31	3.28	0.03	35.87	0.11	1.08	1.19	1.19
110.00	3.33	3.30	0.03	34.24	0.17	1.09	1.18	1.19
140.00	3.32	3.30	0.03	32.73	0.18	1.09	1.17	1.18
170.00	3.33	3.30	0.03	31.50	0.24	1.10	1.16	1.17
200.00	3.34	3.31	0.03	30.43	0.22	1.11	1.16	1.16
275.00	3.36	3.33	0.03	28.50	0.38	1.14	1.13	1.13
350.00	3.39	3.35	0.04	27.19	0.40	1.17	1.11	1.10
425.00	3.40	3.37	0.03	26.27	0.49	1.20	1.09	1.08
475.00	3.41	3.37	0.04	25.83	0.48	1.22	1.09	1.08
500.00	3.44	3.39	0.05	25.63	0.49	1.24	1.10	1.08

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



electrical schematic



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.
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