

Surface Mount Power Splitter/Combiner

2 Way-0° 50Ω 800 to 980 MHz

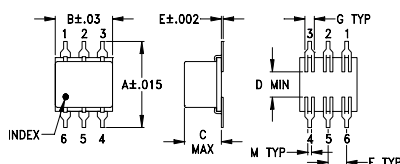
Maximum Ratings

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.

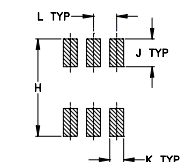
Pin Connections

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

Outline Drawing



PCB Land Pattern



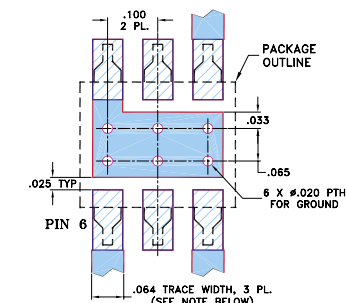
Suggested Layout,
Tolerance to be within ±.002

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-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, 0.5 dB typ.
- high isolation, 30 dB typ.

Applications

- cellular



CASE STYLE: QQQ130

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

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

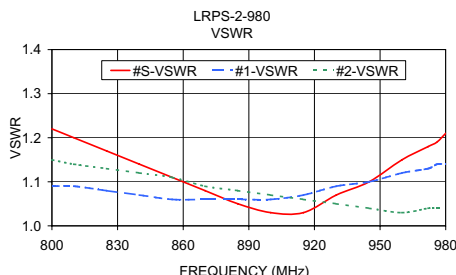
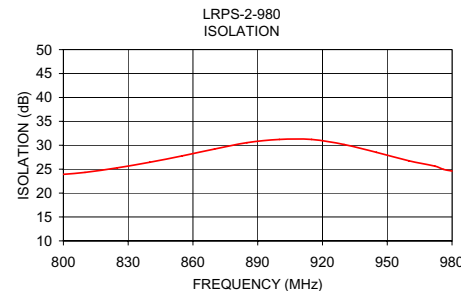
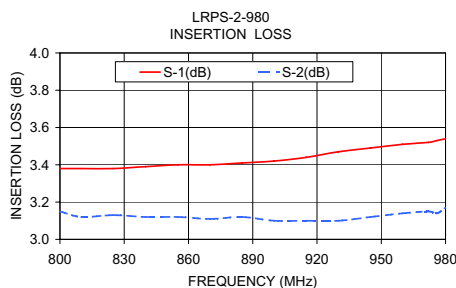
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Splitter Electrical Specifications

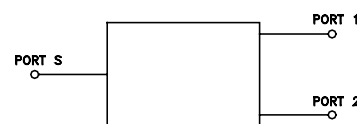
FREQ. RANGE (MHz)	ISOLATION (dB)	INSERTION LOSS (dB) ABOVE 3.0 dB	PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
f_L - f_U	Typ. Min	Typ. Max.	Max.	Max.
800-980	30 18	0.5 1.0	3.0	0.5

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					
800.00	3.38	3.15	0.23	23.91	0.02	1.22	1.09
810.00	3.38	3.12	0.25	24.32	0.04	1.20	1.09
825.00	3.38	3.13	0.25	25.28	0.06	1.17	1.08
840.00	3.39	3.12	0.27	26.45	0.02	1.14	1.07
855.00	3.40	3.12	0.27	27.78	0.07	1.11	1.06
870.00	3.40	3.11	0.29	29.20	0.14	1.08	1.06
885.00	3.41	3.12	0.29	30.54	0.41	1.05	1.06
900.00	3.42	3.10	0.32	31.21	0.63	1.03	1.06
915.00	3.44	3.10	0.34	31.21	0.69	1.03	1.07
930.00	3.47	3.10	0.37	30.16	0.91	1.07	1.09
945.00	3.49	3.12	0.37	28.51	1.01	1.10	1.04
960.00	3.51	3.14	0.38	26.75	1.14	1.15	1.03
972.00	3.52	3.15	0.38	25.64	1.36	1.18	1.04
976.00	3.53	3.14	0.40	24.96	1.31	1.19	1.04
980.00	3.54	3.17	0.38	24.61	1.50	1.21	1.14



electrical schematic



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REV. C
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