

Surface Mount Power Splitter/Combiner

LRPS-3-850J+ LRPS-3-850J

3 Way-0° 50Ω 500 to 850 MHz



Maximum Ratings

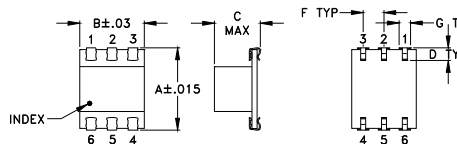
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.375W max.

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

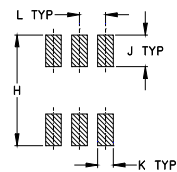
Pin Connections

SUMPORT	6
PORT 1	1
PORT 2	3
PORT 3	4
GROUND	2,5

Outline Drawing



PCB Land Pattern

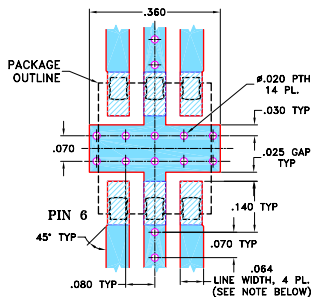


Suggested Layout,
Tolerance to be within ±.002

Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.390	.31	.225	.060	--	.100	.045
9.91	7.87	5.72	1.52	--	2.54	1.14
H	J	K	L	M	wt	
.420	.120	.060	.100	--	grams	
10.67	3.05	1.52	2.54	--	0.50	

Demo Board MCL P/N: TB-226 Suggested PCB Layout (PL-140)



- NOTE:**
- 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.
 - 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

Features

- low insertion loss, 0.7 dB typ.
- good isolation, 23 dB typ.
- aqueous washable
- J-leads for strain relief & excellent solderability

Applications

- UHF
- communication systems

CASE STYLE: QQQ569
PRICE: \$16.95 ea. QTY. (1-9)

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

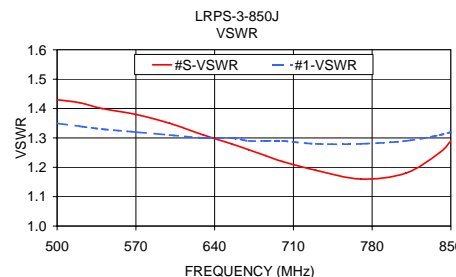
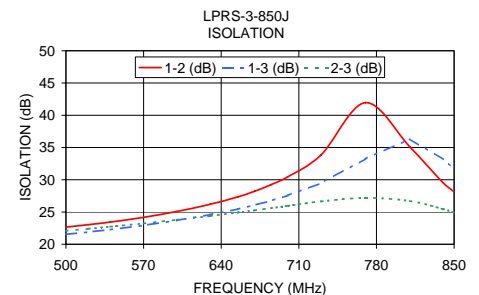
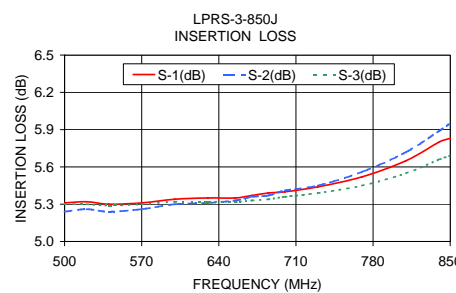
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 4.8 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
	Typ.	Min.	Typ.	Max.	Max.	Max.
$f_c - f_u$						
500-850	23	16	0.7	1.6	8	0.9

Typical Performance Data

Freq. (MHz)	Insertion Loss (dB)			Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 2	VSWR 3
	S-1	S-2	S-3		1-2	1-3	2-3					
500.00	5.31	5.24	5.30	0.08	22.65	21.54	22.09	0.35	1.43	1.35	1.30	1.35
520.00	5.32	5.26	5.30	0.07	23.03	21.90	22.41	0.29	1.42	1.34	1.29	1.34
540.00	5.30	5.24	5.29	0.06	23.44	22.28	22.73	0.40	1.40	1.33	1.28	1.32
570.00	5.31	5.26	5.30	0.05	24.18	22.94	23.24	0.45	1.38	1.32	1.27	1.31
600.00	5.34	5.30	5.32	0.05	25.09	23.70	23.79	0.54	1.35	1.31	1.26	1.29
630.00	5.35	5.31	5.32	0.03	26.20	24.60	24.38	0.69	1.31	1.30	1.25	1.27
655.00	5.35	5.33	5.32	0.03	27.35	25.46	24.93	0.79	1.28	1.30	1.24	1.26
670.00	5.37	5.36	5.33	0.04	28.21	26.08	25.26	0.88	1.26	1.29	1.24	1.25
685.00	5.39	5.37	5.34	0.05	29.25	26.76	25.62	0.99	1.24	1.29	1.23	1.25
700.00	5.40	5.41	5.36	0.05	30.46	27.58	25.97	1.10	1.22	1.29	1.23	1.24
730.00	5.44	5.45	5.39	0.06	33.85	29.49	26.65	1.39	1.19	1.28	1.23	1.23
770.00	5.52	5.56	5.45	0.11	41.96	33.24	27.20	1.76	1.16	1.28	1.23	1.21
810.00	5.65	5.72	5.55	0.17	35.11	36.31	26.71	2.31	1.18	1.29	1.24	1.20
840.00	5.80	5.89	5.66	0.23	29.55	33.17	25.47	2.69	1.25	1.31	1.26	1.20
850.00	5.83	5.95	5.69	0.25	28.14	31.70	24.92	2.83	1.29	1.32	1.27	1.20



electrical schematic



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