

# Surface Mount Power Splitter/Combiner

## LRPS-2-25J+ LRPS-2-25J

2 Way-0° 50Ω 1700 to 2500 MHz



### Maximum Ratings

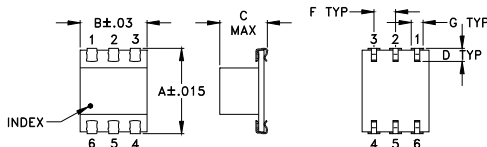
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.125W max.

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

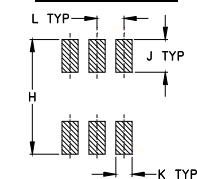
### Pin Connections

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

### Outline Drawing



### PCB Land Pattern

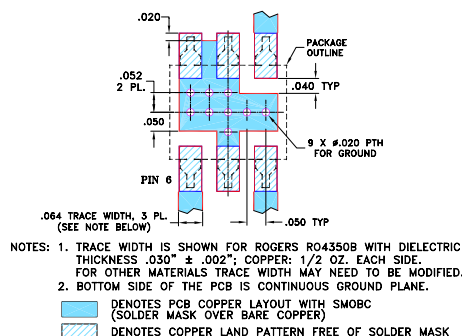


Suggested Layout,  
Tolerance to be within ±0.02

### 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-100 Suggested PCB Layout (PL-057)



### Features

- low insertion loss, 0.8 dB typ.
- good isolation, 20 dB typ.
- aqueous washable
- J-leads for strain relief and excellent solderability

### Applications

- PCS
- DCS
- ISM
- communications systems

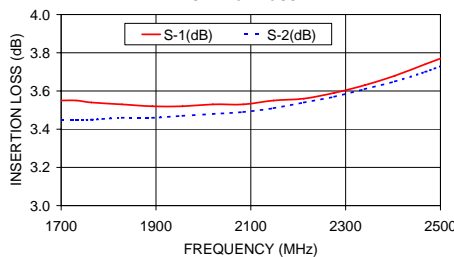
### Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)	INSERTION LOSS (dB) ABOVE 3.0 dB	PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
$f_c - f_u$	Typ. Min.	Typ. Max.	Max.	Max.
1700-2500	20 16	0.8 1.3	10	0.9

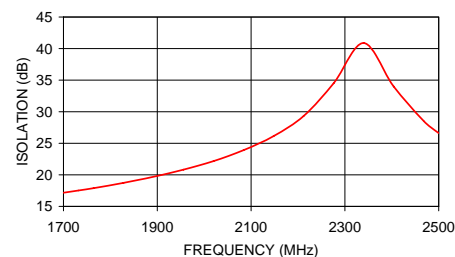
### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
1700.00	3.55	3.45	0.10	17.17	1.63	1.43	1.14	1.15
1732.00	3.55	3.45	0.10	17.52	1.55	1.40	1.13	1.16
1764.00	3.54	3.45	0.09	17.89	1.53	1.38	1.13	1.17
1828.00	3.53	3.46	0.07	18.73	1.43	1.35	1.12	1.19
1892.00	3.52	3.46	0.07	19.69	1.24	1.31	1.12	1.21
1956.00	3.52	3.47	0.05	20.83	1.13	1.28	1.12	1.25
2020.00	3.53	3.48	0.05	22.18	0.94	1.26	1.12	1.27
2084.00	3.53	3.49	0.04	23.91	0.75	1.25	1.11	1.30
2148.00	3.55	3.51	0.04	26.14	0.50	1.25	1.12	1.33
2212.00	3.56	3.54	0.02	29.31	0.34	1.25	1.12	1.36
2276.00	3.59	3.57	0.03	34.50	0.11	1.30	1.13	1.40
2340.00	3.63	3.61	0.03	40.88	0.21	1.32	1.14	1.43
2404.00	3.68	3.65	0.03	34.00	0.40	1.38	1.15	1.47
2468.00	3.74	3.70	0.03	28.52	0.79	1.44	1.16	1.51
2500.00	3.77	3.73	0.03	26.61	0.93	1.49	1.17	1.53

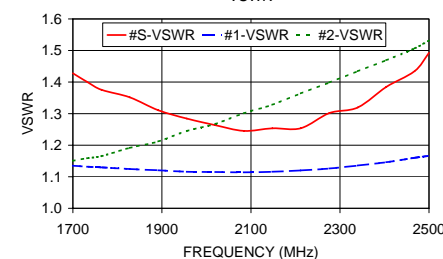
LRPS-2-25J  
INSERTION LOSS



LRPS-2-25J  
ISOLATION



LRPS-2-25J  
VSWR



### electrical schematic



For detailed performance specs & shopping online see web site

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