

# Power Splitter/Combiner

JSPQ-1875W

2 Way-90° 50Ω 1325 to 1875 MHz

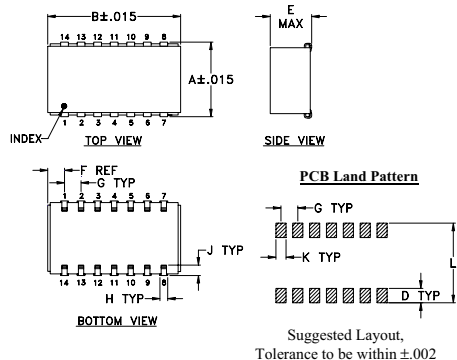
### Maximum Ratings

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

### Pin Connections

SUM PORT	1
PORT 1 (0°)	8
PORT 2 (+90°)	14
GROUND	2,3,4,5,6,9,10,11,12,13
50 OHM TERM EXTERNAL	7

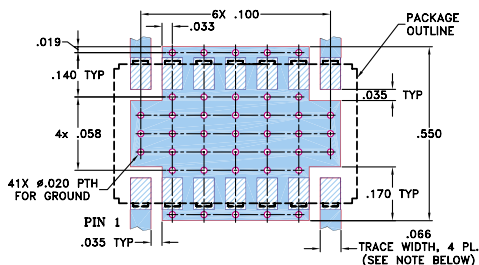
### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	wt
.460	.768	--	.100	.115	.084	.100	.047	.065	.065	.480	grams
11.68	19.51	--	2.54	2.92	2.13	2.54	1.19	1.65	1.65	12.19	1.5

### Demo Board MCL P/N: TB-214 Suggested PCB Layout (PL-102)



- NOTES:
- TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS 0.030" ± 0.002", 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, 0.2 dB typ.
- excellent isolation, 28 dB typ.
- aqueous washable

### Applications

- GPS
- balanced amplifiers
- modulators

### Splitter Electrical Specifications

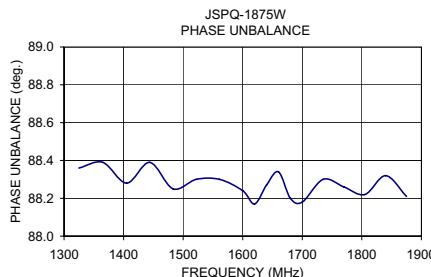
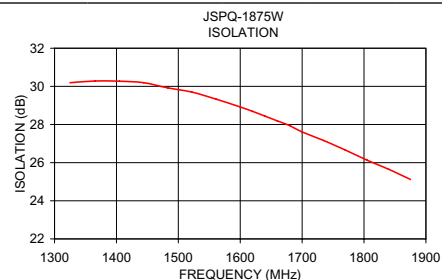
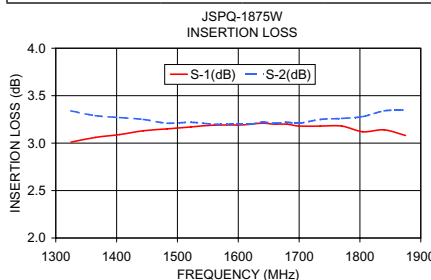
FREQ. RANGE (MHz)	ISOLATION (dB)	INSERTION LOSS (dB) Avg. of Coupled Outputs less 3 dB	PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
$f_L$ - $f_U$	Typ. Min.	Typ. Max.	Max.	Max.
1325-1875	28 18	0.2 0.5	6	1.0

### Typical Performance Data

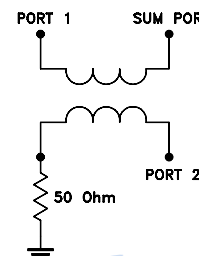
Frequency (MHz)	Insertion Loss (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
1325	3.01	3.34	0.34	30.19	88.36	1.07	1.02	1.05
1365	3.06	3.29	0.23	30.28	88.39	1.07	1.02	1.05
1405	3.09	3.27	0.17	30.27	88.28	1.07	1.03	1.05
1444	3.13	3.25	0.11	30.19	88.39	1.08	1.03	1.05
1483	3.15	3.21	0.06	29.92	88.25	1.08	1.03	1.04
1522	3.17	3.22	0.04	29.70	88.30	1.08	1.04	1.04
1561	3.19	3.20	0.01	29.33	88.30	1.09	1.04	1.04
1600	3.19	3.20	0.01	28.92	88.24	1.09	1.05	1.04
1620	3.20	3.20	0.00	28.69	88.17	1.09	1.05	1.04
1640	3.21	3.22	0.01	28.44	88.27	1.09	1.05	1.04
1660	3.20	3.21	0.01	28.19	88.34	1.10	1.06	1.04
1680	3.20	3.22	0.02	27.94	88.20	1.10	1.06	1.04
1700	3.18	3.21	0.02	27.61	88.18	1.10	1.06	1.04
1735	3.18	3.25	0.07	27.16	88.30	1.11	1.07	1.05
1770	3.18	3.26	0.08	26.66	88.26	1.11	1.07	1.05
1805	3.12	3.28	0.16	26.13	88.22	1.12	1.08	1.05
1840	3.14	3.34	0.20	25.65	88.32	1.12	1.09	1.05
1875	3.08	3.35	0.27	25.12	88.21	1.12	1.10	1.06



CASE STYLE: BK343  
PRICE: Contact Sales Dept.



### electrical schematic



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