

# Surface Mount Power Splitter/Combiner

## JCPS-8-10-75+ JCPS-8-10-75

8 Way-0° 75Ω

5 to 1000 MHz

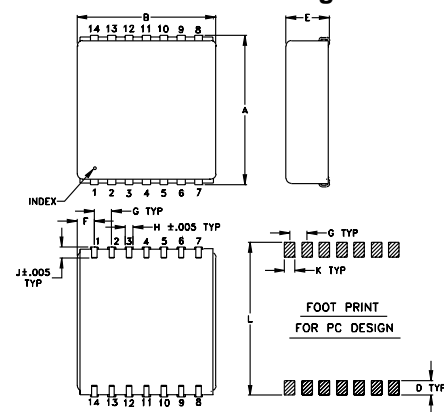
### Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.62W max.

### Pin Connections

SUM PORT	1
PORT 1	3
PORT 2	4
PORT 3	5
PORT 4	6
PORT 5	9
PORT 6	10
PORT 7	11
PORT 8	12
GROUND EXT.	2,7,8,13,14
CASE GROUND	2,7,8,13,14

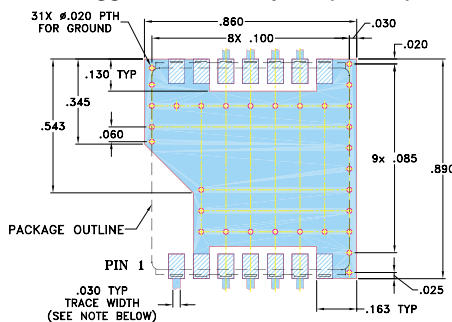
### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	
.870	.800	--	.100	.250	.100	.100	
22.10	20.32	--	2.54	6.35	2.54	2.54	
H	J	K	L				wt
.047	.065	.065	.890				grams
1.19	1.65	1.65	22.61				4.0

### Demo Board MCL P/N: TB-136 Suggested PCB Layout (PL-074)



NOTE: TRACE WIDTH IS SHOWN FOR ROGERS RO4350 WITH DIELECTRIC THICKNESS .030" ± .002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.

- DENOTES PCB COPPER LAYOUT
- DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

### Features

- wideband frequency, 5-1000 MHz
- good isolation, 25 dB typ.
- aqueous washable
- shielded metal case
- solder plated J-leads for good solderability & strain relief

### Applications

- cellular
- VHF/UHF
- CATV
- communication systems



CASE STYLE: BG291  
PRICE: \$71.95 ea. QTY (1-9)

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

See our web site for RoHS Compliance methodologies and qualifications.

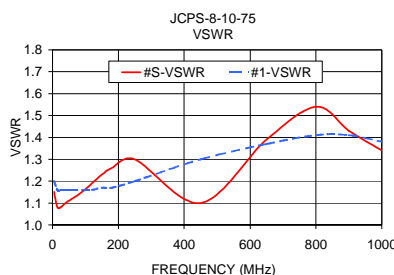
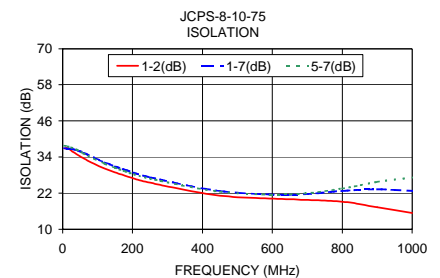
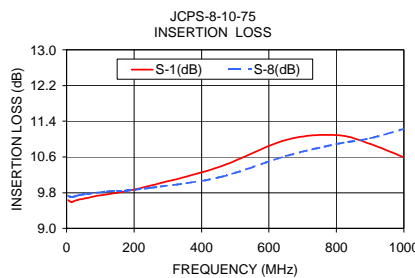
### Splitter Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)			INSERTION LOSS (dB) ABOVE 9 dB			PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)								
	L	M	U	L	M	U	L	M	U	L	M	U						
f <sub>L</sub> -f <sub>U</sub>	Typ. Min.	Typ. Min.	Typ. Min.	Typ. Max.	Typ. Max.	Typ. Max.	Max.	Max.	Max.	Max.	Max.	Max.						
5-1000	34	20	25	15	20	13	0.8	1.5	1.0	2.5	1.8	3.0	3	8	10	0.4	0.5	1.3

L = low range [f<sub>L</sub> to 10 f<sub>L</sub>] M = mid range [10 f<sub>L</sub> to f<sub>U</sub>/2] U = upper range [f<sub>U</sub>/2 to f<sub>U</sub>]

### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)						Amplitude Unbalance (dB)	Isolation (dB)				VSWR S	VSWR 1	VSWR 8
	S-1	S-2	S-3	S-4	S-6	S-8		1-2	1-7	3-4	5-7			
5.00	9.63	9.66	9.81	9.63	9.81	9.73	0.18	36.86	36.93	38.23	37.80	1.15	1.20	1.20
15.00	9.59	9.62	9.77	9.60	9.76	9.70	0.18	36.96	36.74	37.32	37.54	1.08	1.16	1.17
25.00	9.62	9.64	9.80	9.62	9.77	9.72	0.18	36.13	36.68	36.29	37.18	1.08	1.16	1.17
40.00	9.65	9.68	9.83	9.65	9.80	9.75	0.18	34.98	36.27	34.95	36.47	1.10	1.16	1.17
60.00	9.68	9.71	9.86	9.68	9.82	9.77	0.18	33.54	35.41	33.42	35.16	1.12	1.16	1.16
90.00	9.73	9.74	9.89	9.71	9.83	9.80	0.18	31.75	33.80	31.44	33.40	1.15	1.16	1.16
120.00	9.76	9.77	9.92	9.74	9.84	9.83	0.18	30.21	32.26	29.89	31.80	1.19	1.16	1.15
150.00	9.80	9.80	9.94	9.76	9.82	9.84	0.18	28.91	30.87	28.51	30.40	1.23	1.17	1.15
180.00	9.84	9.82	9.96	9.77	9.82	9.85	0.18	27.75	29.70	27.33	29.19	1.26	1.17	1.14
250.00	9.96	9.91	10.02	9.85	9.80	9.91	0.22	25.45	27.28	25.03	26.79	1.30	1.20	1.15
450.00	10.37	10.22	10.27	10.09	9.79	10.14	0.59	21.16	22.69	20.90	22.48	1.10	1.30	1.20
650.00	10.98	10.76	10.84	10.67	10.23	10.62	0.74	19.97	21.47	20.36	21.55	1.39	1.37	1.30
800.00	11.09	10.96	11.12	11.00	10.65	10.89	0.47	19.16	22.74	20.83	23.52	1.54	1.41	1.36
900.00	10.89	10.91	11.11	11.00	10.86	11.02	0.29	17.26	23.27	19.18	25.71	1.43	1.41	1.38
1000.00	10.59	10.78	11.02	10.92	11.08	11.23	0.64	15.42	22.72	16.92	27.17	1.34	1.38	1.38



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