

# Surface Mount Power Splitter/Combiner

## JS4PS-1W-75+ JS4PS-1W-75

4 Way-0° 75Ω

5 to 750 MHz

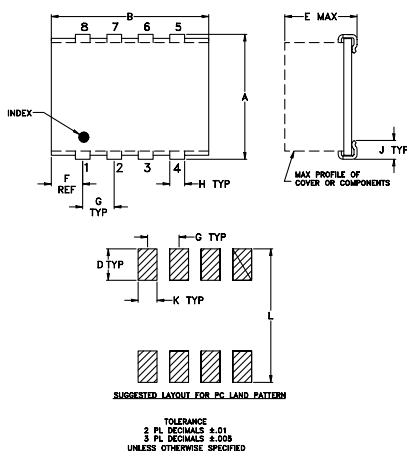
### Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	0.25W max.
Internal Dissipation	0.25W max.

### Pin Connections

SUM PORT	2
PORT 1	8
PORT 2	7
PORT 3	6
PORT 4	5
GROUND	1,3,4

### Outline Drawing

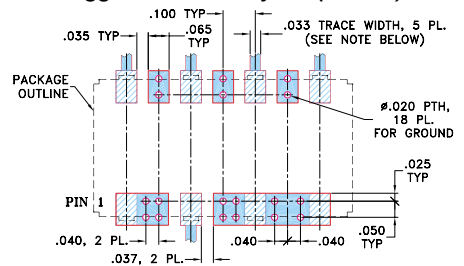


### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.450	.800	--	.100	.250	.100	.200
11.43	20.32	--	2.54	6.35	2.54	5.08

H	J	K	L	wt
.047	.065	.065	.480	grams
1.19	1.65	1.65	12.19	1.7

### Demo Board MCL P/N: TB-218 Suggested PCB Layout (PL-149)



NOTE: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350 WITH DIELECTRIC THICKNESS 0.030" ± 0.002". 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.

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

### Features

- high isolation, 35 dB typ.
- excellent input matching, VSWR 1.2 typ.
- very good output matching, VSWR 1.15 typ.
- excellent amplitude unbalance, 0.3 dB typ.
- aqueous washable
- shielded case

### Applications

- catv
- VHF/UHF
- communications systems
- instrumentation



CASE STYLE: BJ360  
PRICE: \$18.95 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 6 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.						
5-750	34	25	35	25	30	18	0.6	1.2	0.6	1.5	0.8	1.5	3	5	6	0.2	0.3	0.6

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

Freq. (MHz)	Insertion Loss (dB)				Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 2	VSWR 3	VSWR 4
	S-1	S-2	S-3	S-4		1-2	2-3	3-4						
5.00	6.51	6.53	6.51	6.52	0.02	33.42	34.84	30.80	0.13	1.12	1.23	1.23	1.26	1.25
20.00	6.51	6.51	6.50	6.50	0.01	39.75	34.95	36.28	0.13	1.10	1.20	1.20	1.22	1.21
35.00	6.53	6.53	6.51	6.52	0.02	46.54	34.94	41.41	0.13	1.10	1.20	1.20	1.21	1.21
50.00	6.54	6.54	6.53	6.53	0.02	49.42	34.89	44.53	0.19	1.10	1.20	1.20	1.20	1.21
90.00	6.56	6.58	6.57	6.56	0.02	43.36	34.93	44.03	0.22	1.11	1.20	1.20	1.20	1.21
135.00	6.59	6.58	6.58	6.61	0.03	39.24	35.35	40.26	0.29	1.11	1.20	1.20	1.20	1.20
180.00	6.60	6.61	6.60	6.58	0.03	36.65	36.16	37.67	0.25	1.12	1.19	1.19	1.19	1.20
225.00	6.63	6.62	6.62	6.63	0.01	34.85	37.45	35.74	0.41	1.13	1.19	1.18	1.18	1.20
270.00	6.65	6.65	6.64	6.62	0.04	33.54	39.30	34.49	0.50	1.14	1.17	1.17	1.17	1.19
315.00	6.65	6.65	6.66	6.64	0.02	32.46	40.95	33.40	0.60	1.16	1.16	1.16	1.16	1.18
360.00	6.67	6.68	6.67	6.66	0.03	31.56	40.98	32.54	0.66	1.17	1.16	1.15	1.15	1.18
400.00	6.70	6.70	6.69	6.66	0.04	30.98	39.58	31.85	0.61	1.18	1.15	1.14	1.14	1.17
550.00	6.76	6.78	6.78	6.74	0.03	28.79	30.55	29.48	0.96	1.22	1.13	1.12	1.12	1.15
650.00	6.83	6.85	6.85	6.81	0.04	27.77	26.75	28.36	0.46	1.21	1.13	1.12	1.11	1.14
750.00	6.91	6.91	6.88	6.80	0.11	26.92	23.96	27.58	0.28	1.19	1.14	1.14	1.12	1.15

