

Surface Mount

# Power Splitter/Combiner

JS4PS-9-75

4 Way-0° 75Ω 50 to 860 MHz



CASE STYLE: BJ360  
PRICE: \$20.95 ea. QTY. (1-9)

## Maximum Ratings

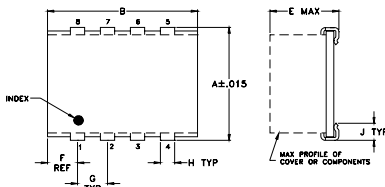
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	0.50W max.
Internal Dissipation	0.50W max.

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

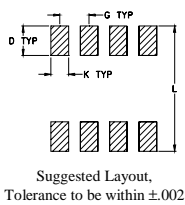
## Pin Connections

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

## Outline Drawing



## PCB Land Pattern



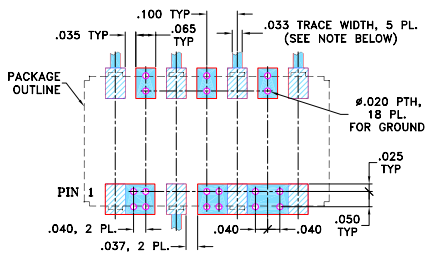
## Outline Dimensions (inch/mm)

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 RO4350B 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 WITH SMOBC (SOLDER MASK OVER BARE COPPER)
  - ▨ DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

## Features

- high isolation, 25 dB typ.
- excellent input matching, VSWR 1.2 typ.
- very good output matching, VSWR 1.3 typ.
- excellent amplitude unbalance, 0.15 dB typ.
- aqueous washable
- shielded case

## Applications

- catv
- VHF/UHF
- receivers/transmitters
- communication systems

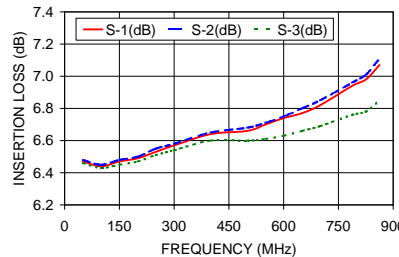
## Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 6.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
$f_c-f_u$	Typ.	Min.	Typ.	Max.	Max.	Max.
50-860	25	16	0.6	1.9	5	0.8

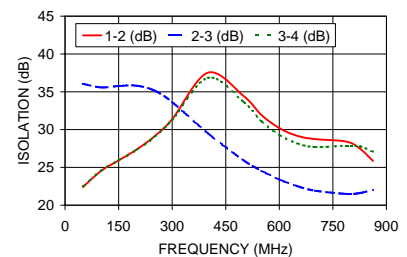
## Typical Performance Data

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						
50.00	6.47	6.48	6.46	6.51	0.07	22.39	36.06	22.48	0.15	1.08	1.30	1.31	1.31	1.30
100.00	6.44	6.45	6.43	6.48	0.07	24.50	35.58	24.55	0.24	1.08	1.25	1.26	1.26	1.25
150.00	6.47	6.48	6.45	6.51	0.07	25.93	35.76	25.92	0.30	1.13	1.25	1.26	1.27	1.26
200.00	6.49	6.50	6.47	6.53	0.08	27.35	35.80	27.30	0.37	1.16	1.25	1.26	1.26	1.26
250.00	6.53	6.55	6.51	6.57	0.08	29.09	35.17	29.02	0.47	1.20	1.26	1.28	1.29	1.28
300.00	6.57	6.58	6.54	6.60	0.08	31.38	33.64	31.27	0.54	1.23	1.27	1.28	1.29	1.28
400.00	6.64	6.65	6.60	6.66	0.09	37.52	29.52	36.85	0.68	1.24	1.28	1.29	1.30	1.29
500.00	6.66	6.68	6.60	6.66	0.11	34.44	25.94	33.67	0.82	1.21	1.27	1.28	1.29	1.29
550.00	6.70	6.71	6.61	6.68	0.13	31.93	24.56	31.12	0.93	1.19	1.26	1.27	1.28	1.28
600.00	6.74	6.75	6.63	6.70	0.16	30.20	23.40	29.29	1.00	1.16	1.26	1.27	1.27	1.27
650.00	6.77	6.80	6.66	6.73	0.17	29.18	22.53	28.18	1.13	1.13	1.25	1.26	1.26	1.26
700.00	6.82	6.85	6.69	6.76	0.20	28.75	21.92	27.70	1.23	1.10	1.24	1.26	1.26	1.25
787.50	6.94	6.96	6.76	6.83	0.24	28.41	21.50	27.87	1.57	1.08	1.25	1.28	1.26	1.26
825.50	6.98	7.01	6.78	6.87	0.26	27.49	21.60	27.79	1.70	1.09	1.27	1.30	1.29	1.28
862.50	7.07	7.11	6.85	6.93	0.30	25.86	22.03	27.08	1.96	1.11	1.28	1.32	1.30	1.29

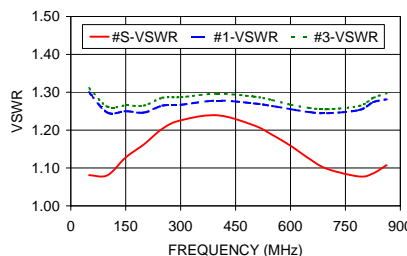
JS4PS-9-75  
INSERTION LOSS



JS4PS-9-75  
ISOLATION



JS4PS-9-75  
VSWR



## electrical schematic



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