Surface Mount

Power Splitter/Combiner

JS4PS-9-75

4 Way-0° 75Ω 50 to 860 MHz

CASE STYLE: BJ360
PRICE: $49.95 ea. QTY. (1-9)

Maximum Ratings

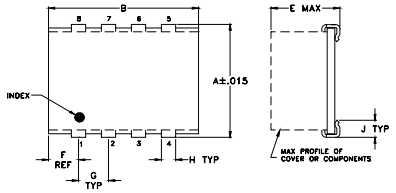
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	0.50W max.
Internal Dissipation	0.50W max.

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

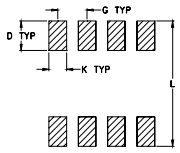
Pin Connections

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

Outline Drawing



PCB Land Pattern



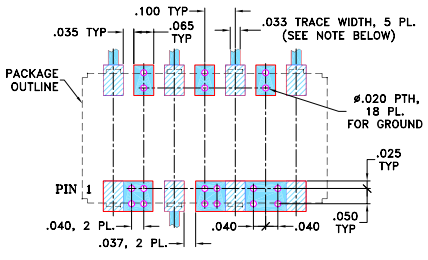
Suggested Layout,
Tolerance to be within ±.002

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

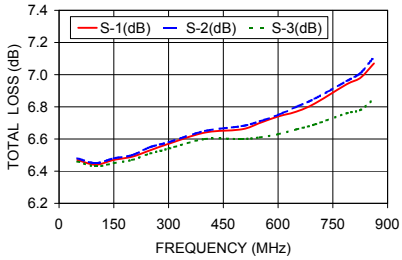
FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 6.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
f_L-f_U	Typ.	Min.	Typ.	Max.	Max.	Max.
50-860	25	16	0.6	1.9	5	0.8

Typical Performance Data

Freq. (MHz)	Total Loss[1] (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

1. Total Loss = Insertion Loss + 6dB splitter loss.

JS4PS-9-75
TOTAL LOSS



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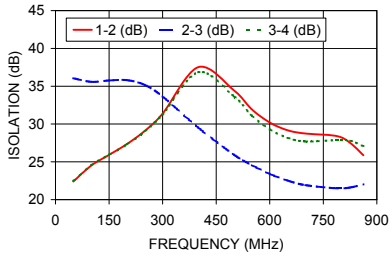
ISOLATION



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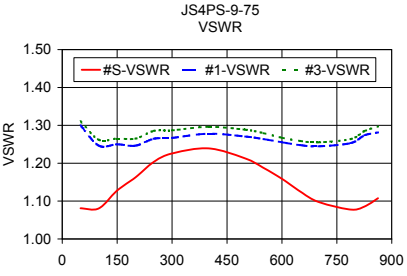
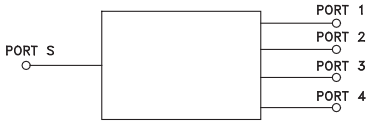
VSWR



electrical schematic



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IF/RF MICROWAVE COMPONENTS

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