Surface Mount

Power Splitter/Combiner

JS4PS-1W-75

4 Way-0° 75Ω 5 to 750 MHz

CASE STYLE: BJ360
PRICE: $18.95 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)	0.25W 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

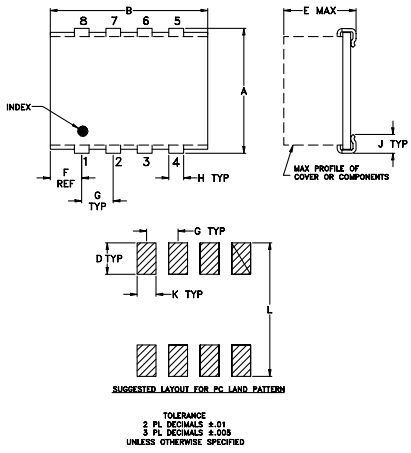
Features

- 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

Outline Drawing

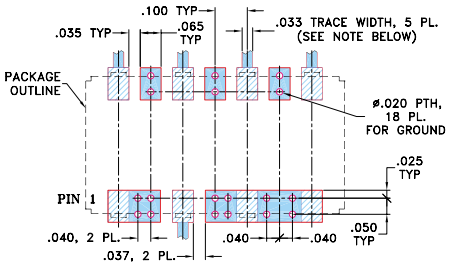


Outline Dimensions (inch / mm)

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

Splitter Electrical Specifications

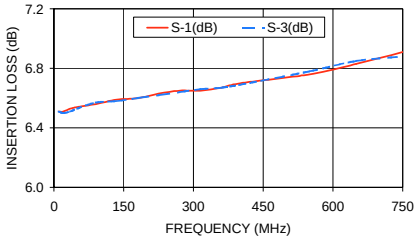
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 6 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U	L	M	U
f_L-f_U	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
5-750	34	25	35	25	30	18	0.6	1.2	0.6	1.5	0.8	1.5	3	5	6	0.2	0.3	0.6

L = low range [f_L to 10 f_L] M = mid range [10 f_L to f_U/2] U = upper range [f_U/2 to f_U]

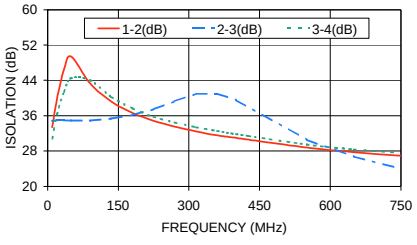
Typical Performance Data

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

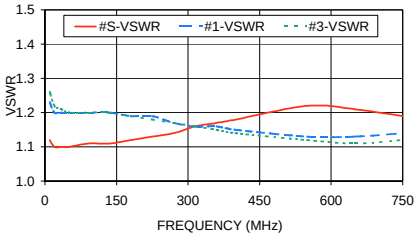
JS4PS-1W-75
INSERTION LOSS



JS4PS-1W-75
ISOLATION



JS4PS-1W-75
VSWR



electrical schematic