

Surface Mount

Power Splitter/Combiner

JS4PS-1+ JS4PS-1

4 Way-0° 50Ω 80 to 520 MHz



CASE STYLE: BJ360

Maximum Ratings

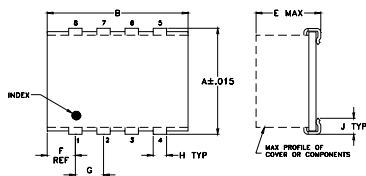
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	0.75W max.
Internal Dissipation	0.5W max.

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

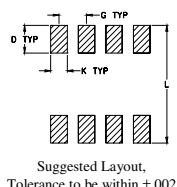
Pin Connections

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

Outline Drawing



PCB Land Pattern

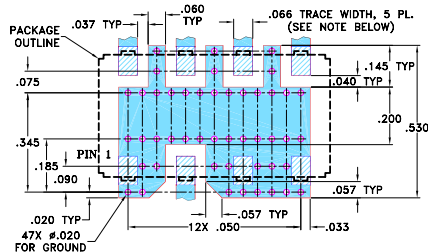


Outline Dimensions (inch/mm)

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-215 Suggested PCB Layout (PL-101)



- NOTES:
- 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.
 - 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

Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/WCLStore/terms.jsp

Features

- high isolation, 35 dB typ.
- good input matching, VSWR 1.2 typ.
- good output matching VSWR, 1.1 typ.
- aqueous washable
- shielded case

Applications

- VHF/UHF
- receivers/transmitters
- instrumentation

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

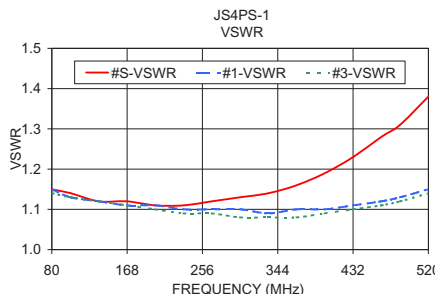
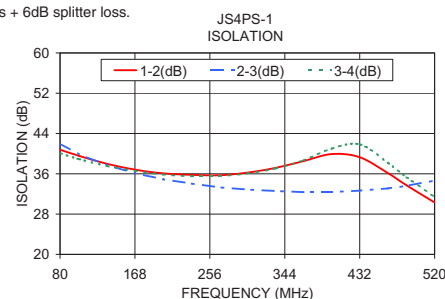
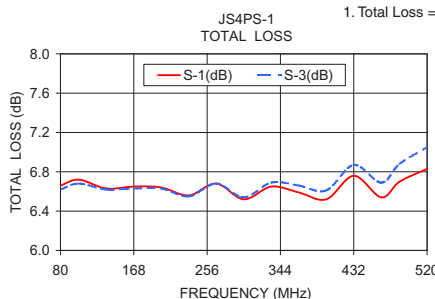
Electrical Specifications

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.
80-520	35 20	0.8 1.5	5	0.5

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						
80.00	6.66	6.66	6.62	6.69	0.07	40.78	42.03	40.10	0.14	1.15	1.15	1.14	1.14	1.14
102.00	6.72	6.71	6.68	6.67	0.04	39.58	39.87	38.93	0.30	1.14	1.13	1.13	1.13	1.13
135.00	6.63	6.63	6.62	6.71	0.09	37.99	37.74	37.56	0.30	1.12	1.12	1.12	1.12	1.12
168.00	6.65	6.65	6.63	6.69	0.06	36.83	36.11	36.58	0.34	1.12	1.11	1.11	1.11	1.11
201.00	6.64	6.65	6.63	6.67	0.04	36.10	34.92	35.88	0.36	1.11	1.11	1.10	1.10	1.10
234.00	6.56	6.55	6.55	6.71	0.16	35.80	34.07	35.54	0.34	1.11	1.10	1.10	1.09	1.09
267.00	6.68	6.68	6.68	6.66	0.02	35.71	33.31	35.56	0.55	1.12	1.10	1.09	1.09	1.09
300.00	6.52	6.52	6.54	6.68	0.17	36.23	32.88	36.07	0.61	1.13	1.10	1.09	1.08	1.08
333.00	6.65	6.65	6.69	6.73	0.08	37.17	32.59	37.05	0.59	1.14	1.09	1.09	1.08	1.08
366.00	6.59	6.60	6.66	6.64	0.07	38.51	32.35	38.66	0.54	1.16	1.10	1.09	1.08	1.08
399.00	6.52	6.53	6.61	6.66	0.14	39.93	32.37	40.99	0.65	1.19	1.10	1.09	1.09	1.08
432.00	6.76	6.78	6.87	6.74	0.13	39.29	32.67	41.86	0.55	1.23	1.11	1.10	1.10	1.09
465.00	6.54	6.56	6.69	6.66	0.15	36.15	33.10	38.20	0.67	1.28	1.12	1.12	1.11	1.11
487.00	6.70	6.72	6.88	6.69	0.20	33.71	33.61	35.32	0.66	1.31	1.13	1.13	1.12	1.12
520.00	6.83	6.84	7.05	6.75	0.30	30.30	34.67	31.43	0.77	1.38	1.15	1.15	1.14	1.14

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



electrical schematic

