

Power Splitter/Combiner

JPS-2-4-75+

2 Way-0° 75Ω 20 to 1000 MHz



CASE STYLE: BH292

Maximum Ratings

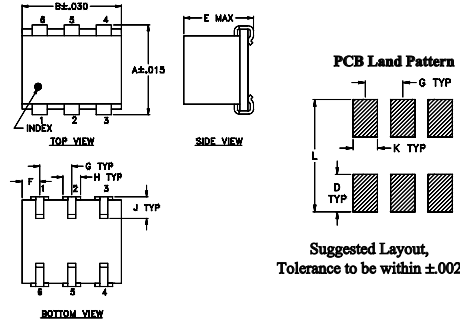
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.125W max.

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

Pin Connections

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

Outline Drawing

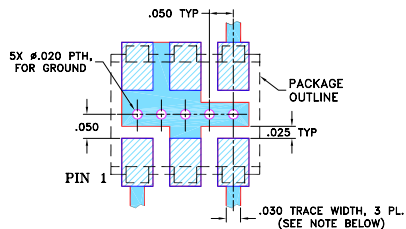


Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.280	.310	--	.100	.225	.055	.100
7.11	7.87	--	2.54	5.72	1.40	2.54

H	J	K	L	wt
.047	.065	.065	.300	grams
1.19	1.65	1.65	7.62	0.45

Demo Board MCL P/N: TB-169 Suggested PCB Layout (PL-054)



- NOTES: 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

Notes

- A. 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.
 B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
 C. The parts covered by this specification document are subject to Mini-Circuit's 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-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp

Features

- low insertion loss, 0.4 dB typ.
- excellent insertion loss flatness, 0.2 dB peak to peak typ.
- excellent amplitude unbalance, 0.05 dB typ.
- good phase unbalance, 0.2 deg. typ.
- J-leads for excellent solderability and strain relief

Applications

- cable tv
- cellular

+RoHS Compliant

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

Electrical Specifications

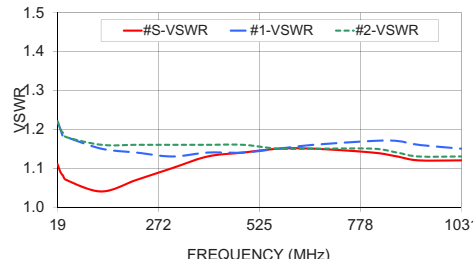
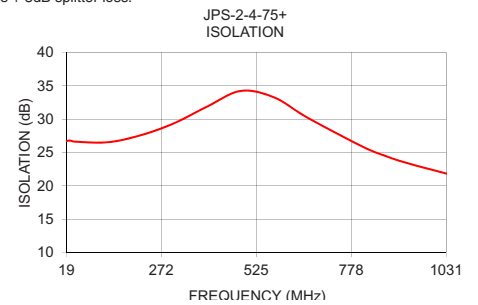
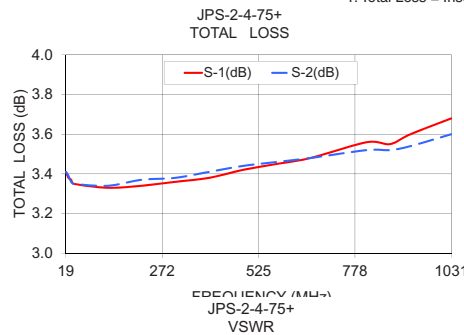
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 3.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U	L	M	U
f_L - f_U	Typ.	Min	Typ.	Min	Typ.	Min	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
20-1000	27	20	29	20	27	16	0.35	0.7	0.4	0.8	0.45	1.0	2.0	2.0	3.0	0.2	0.2	0.3

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

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
19.00	3.41	3.41	0.00	26.71	0.06	1.11	1.22	1.22
26.00	3.38	3.39	0.01	26.79	0.06	1.09	1.20	1.20
33.00	3.37	3.36	0.00	26.73	0.10	1.08	1.18	1.19
40.00	3.35	3.35	0.00	26.63	0.10	1.07	1.18	1.18
128.75	3.33	3.34	0.01	26.53	0.13	1.04	1.15	1.16
217.50	3.34	3.37	0.03	27.59	0.18	1.07	1.14	1.16
306.25	3.36	3.38	0.02	29.39	0.12	1.10	1.13	1.16
395.00	3.38	3.41	0.03	31.91	0.04	1.13	1.14	1.16
483.75	3.42	3.44	0.02	34.23	0.01	1.14	1.14	1.16
572.50	3.45	3.46	0.01	33.25	0.10	1.15	1.15	1.15
661.25	3.48	3.48	0.00	30.22	0.15	1.15	1.16	1.15
810.00	3.56	3.52	0.04	25.82	0.38	1.14	1.17	1.15
870.00	3.55	3.52	0.03	24.46	0.53	1.13	1.17	1.14
923.75	3.60	3.54	0.06	23.46	0.59	1.12	1.16	1.13
1031.25	3.68	3.60	0.08	21.84	0.68	1.12	1.15	1.13

1. Total Loss = Insertion Loss + 3dB splitter loss.



electrical schematic

