Surface Mount

Power Splitter/Combiner

JPS-2-4+

2 Way-0° 50Ω 100 to 1000 MHz



Generic photo used for illustration purposes only

CASE STYLE: BH292

+RoHS Compliant

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

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

SUMPORT	1
PORT 1	3
PORT 2	4
GROUND	6
NOT USED	2,5

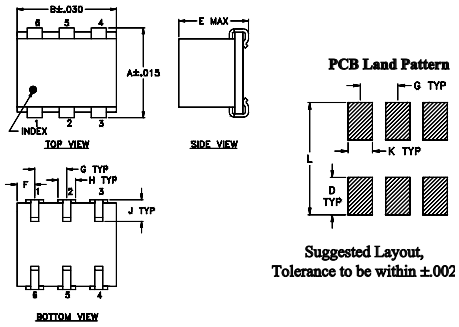
Features

- wide bandwidth 100-1000 MHz
- low insertion loss, 0.5 dB typ.
- good isolation, 22 dB typ.
- excellent VSWR
- J-leads for excellent solderability and strain relief

Applications

- VHF/UHF
- cellular
- instrumentation

Outline Drawing

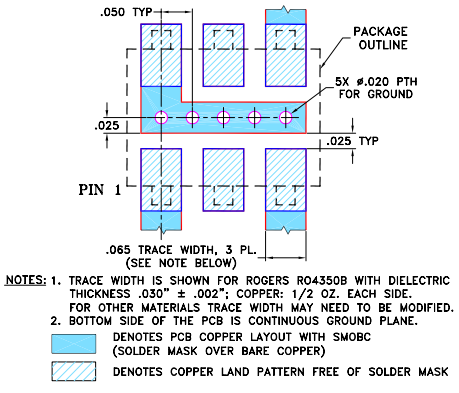


Outline Dimensions (inch / mm)

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-48+
Suggested PCB Layout (PL-035)



NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .030" ± .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

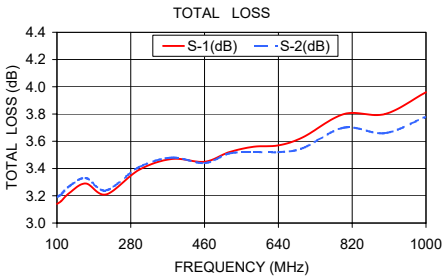
Electrical Specifications

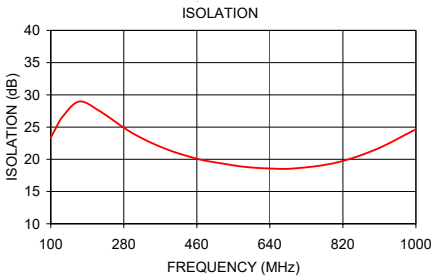
FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 3.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
f_L-f_U	Typ.	Min	Typ.	Max.	Max.	Max.
100-1000	22	16	0.5	1.4	5.0	0.4

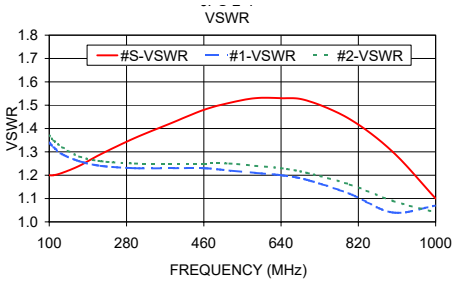
Typical Performance Data

Frequency (MHz)	Total Loss[1] (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
100.00	3.14	3.19	0.06	23.36	0.47	1.20	1.34	1.37
110.00	3.16	3.21	0.05	24.54	0.35	1.20	1.32	1.35
130.00	3.22	3.27	0.05	26.69	0.32	1.21	1.29	1.32
170.00	3.29	3.33	0.05	28.97	0.20	1.24	1.26	1.28
220.00	3.21	3.24	0.03	27.50	0.09	1.29	1.24	1.26
300.00	3.39	3.41	0.03	24.11	0.05	1.36	1.23	1.25
380.00	3.47	3.48	0.01	21.70	0.08	1.42	1.23	1.25
460.00	3.45	3.44	0.01	20.09	0.11	1.48	1.23	1.25
520.00	3.52	3.51	0.02	19.37	0.09	1.51	1.22	1.25
580.00	3.56	3.52	0.04	18.82	0.09	1.53	1.21	1.24
640.00	3.57	3.52	0.05	18.57	0.05	1.53	1.20	1.23
700.00	3.63	3.55	0.08	18.59	0.00	1.52	1.18	1.21
800.00	3.80	3.70	0.10	19.43	0.31	1.44	1.12	1.16
900.00	3.80	3.66	0.15	21.49	0.55	1.30	1.04	1.09
1000.00	3.96	3.78	0.18	24.65	1.08	1.10	1.07	1.04

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







electrical schematic



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.
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