Surface Mount

Power Splitter/Combiner

JPS-3-1W+

3 Way-0° 50Ω 50 to 750 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	0.5W max.

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

Pin Connections

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

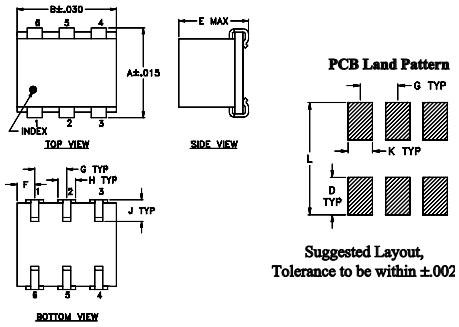
Features

- wideband, 50 to 750 MHz
- low insertion loss, 0.4 dB typ.
- solder plated J-leads

Applications

- VHF/UHF
- defense & federal communications

Outline Drawing

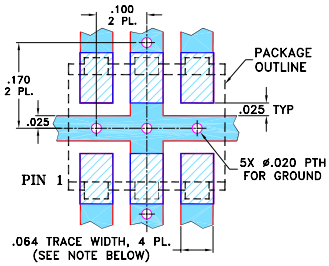


Outline Dimensions (inch / mm)

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-211
Suggested PCB Layout (PL-097)



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

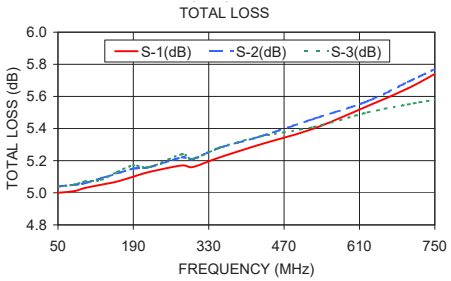
FREQ. RANGE (MHz)	ISOLATION (dB)				INSERTION LOSS (dB) ABOVE 4.8 dB				PHASE UNBALANCE (Degrees)		AMPLITUDE UNBALANCE (dB)	
	L		U		L		U		L	U	L	U
f_L-f_U	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.
50-750	23	17	25	17	0.4	1.0	0.9	1.4	6	7	0.3	0.6

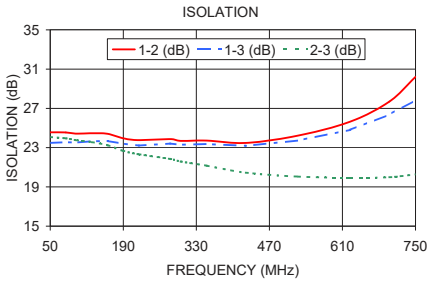
L = low range [f_L to $f_U/2$] U= upper range [$f_U/2$ to f_U]

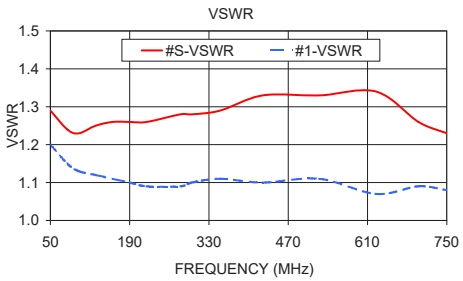
Typical Performance Data

Freq. (MHz)	Total Loss[1] (dB)			Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 2	VSWR 3
	S-1	S-2	S-3		1-2	1-3	2-3					
50.00	5.00	5.04	5.04	0.04	24.56	23.48	24.08	0.21	1.29	1.20	1.18	1.20
80.00	5.01	5.05	5.05	0.04	24.55	23.55	23.95	0.31	1.24	1.15	1.14	1.15
100.00	5.03	5.06	5.07	0.04	24.43	23.52	23.76	0.51	1.23	1.13	1.13	1.12
130.00	5.05	5.09	5.08	0.04	24.47	23.65	23.56	0.60	1.25	1.12	1.13	1.11
160.00	5.07	5.12	5.13	0.06	24.41	23.68	23.24	0.67	1.26	1.11	1.12	1.10
190.00	5.10	5.15	5.17	0.07	23.95	23.40	22.67	0.78	1.26	1.10	1.11	1.11
220.00	5.13	5.16	5.16	0.04	23.77	23.21	22.32	0.91	1.26	1.09	1.09	1.11
280.00	5.17	5.22	5.24	0.07	23.87	23.42	21.85	1.07	1.28	1.09	1.10	1.10
300.00	5.16	5.21	5.21	0.05	23.69	23.30	21.59	0.99	1.28	1.10	1.11	1.10
350.00	5.22	5.28	5.28	0.06	23.72	23.37	21.16	1.13	1.29	1.11	1.12	1.12
425.00	5.30	5.35	5.35	0.05	23.48	23.19	20.45	1.21	1.33	1.10	1.12	1.12
525.00	5.40	5.46	5.41	0.06	24.23	23.73	20.05	1.32	1.33	1.11	1.10	1.08
625.00	5.54	5.57	5.50	0.08	25.65	24.82	19.93	1.29	1.34	1.07	1.06	1.05
700.00	5.65	5.69	5.55	0.14	27.70	26.38	19.99	1.28	1.26	1.09	1.07	1.06
750.00	5.74	5.77	5.58	0.19	30.21	27.84	20.28	1.05	1.23	1.08	1.04	1.07

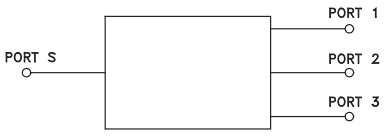
1. Total Loss = Insertion Loss + 4.8dB splitter loss.







electrical schematic



Notes

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