

Surface Mount Power Splitter/Combiner

3 Way-0° 50Ω 5 to 300 MHz

JPS-3-1+
JPS-3-1



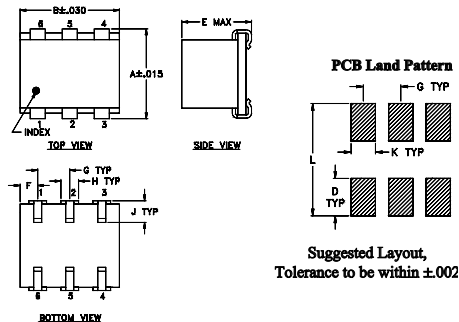
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.375W 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

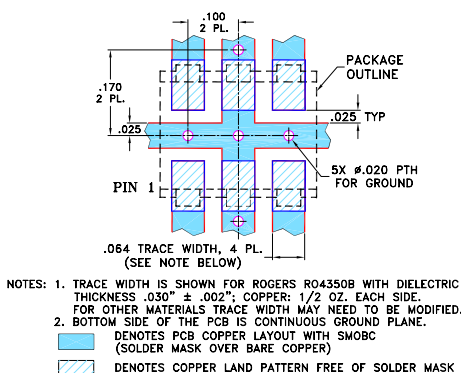
Outline Drawing



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)



Features

- wideband, 5 to 300 MHz
- high isolation, 33 dB typ.
- low insertion loss, 0.3 dB typ.

Applications

- VHF
- defense & federal communications
- amateur & FM radio

CASE STYLE: BH292
PRICE: \$13.95 ea. QTY. (1-9)

+ RoHS compliant in accordance
with EU Directive (2002/95/EC)

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

Electrical Specifications

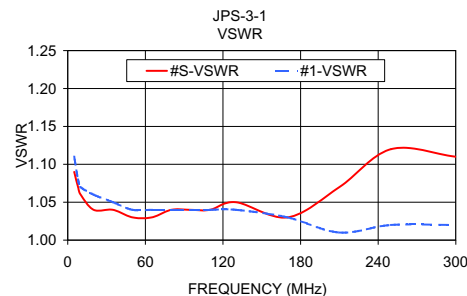
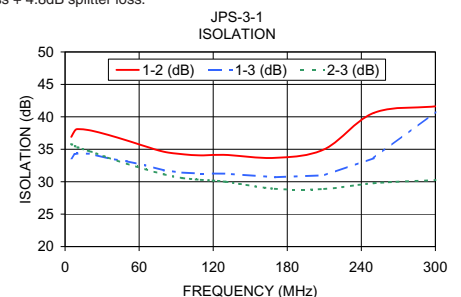
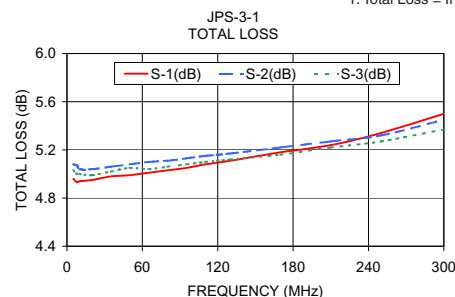
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 4.8 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U	L	M	U
	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
5-300	34	25	33	23	32	20	0.3	0.6	0.3	0.7	0.5	1.4	2.0	4.0	6.0	0.4	0.4	0.6

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

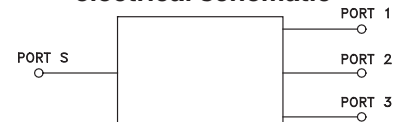
Typical Performance Data

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					
5.00	4.96	5.08	5.03	0.12	36.91	33.62	35.80	0.62	1.09	1.11	1.13	1.16
8.00	4.93	5.07	5.00	0.14	37.89	34.24	35.50	0.52	1.07	1.08	1.10	1.14
10.00	4.94	5.04	5.00	0.11	38.11	34.35	35.29	0.36	1.06	1.07	1.10	1.13
20.00	4.95	5.04	4.99	0.09	37.92	34.31	34.69	0.22	1.04	1.06	1.08	1.12
35.00	4.98	5.06	5.02	0.08	37.22	33.58	33.72	0.13	1.04	1.05	1.07	1.11
50.00	4.99	5.08	5.05	0.09	36.36	33.15	32.78	0.13	1.03	1.04	1.06	1.11
65.00	5.01	5.10	5.04	0.08	35.45	32.52	31.94	0.25	1.03	1.04	1.05	1.11
80.00	5.03	5.11	5.06	0.08	34.62	31.74	31.15	0.26	1.04	1.04	1.05	1.10
95.00	5.05	5.13	5.08	0.08	34.24	31.40	30.56	0.14	1.04	1.04	1.05	1.09
110.00	5.08	5.15	5.10	0.07	34.06	31.26	30.29	0.23	1.04	1.04	1.05	1.09
130.00	5.11	5.17	5.12	0.06	34.13	31.25	29.99	0.37	1.05	1.04	1.05	1.08
170.00	5.18	5.22	5.16	0.05	33.68	30.69	28.91	0.41	1.03	1.03	1.07	1.07
210.00	5.24	5.27	5.22	0.05	35.00	30.99	28.88	0.54	1.07	1.01	1.07	1.07
250.00	5.34	5.32	5.27	0.07	40.60	33.64	29.78	0.57	1.12	1.02	1.08	1.08
300.00	5.50	5.45	5.37	0.12	41.62	40.75	30.25	0.91	1.11	1.02	1.12	1.11

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



electrical schematic



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