

Surface Mount Power Splitter/Combiner

4 Way-0° 50Ω

1 to 500 MHz

AD4PS-1+
AD4PS-1

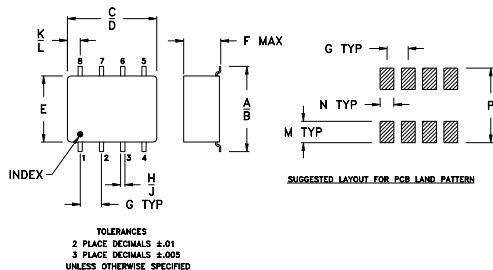
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	0.5W max.
Internal Dissipation	0.25W max.

Pin Connections

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

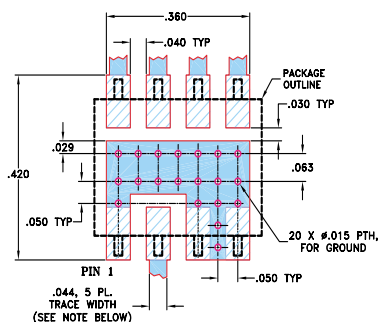
Outline Drawing



Outline Dimensions (inch)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	wt
.345	.400	.385	.435	.310	.215	.100	.015	.025	.035	.075	.120	.060	.420	grams
8.76	10.16	9.78	11.05	7.87	5.46	2.54	0.38	0.64	0.89	1.91	3.05	1.52	10.67	0.45

Demo Board MCL P/N: TB-81 Suggested PCB Layout (PL-072)



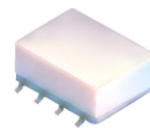
- NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS R04350B WITH DIELECTRIC THICKNESS 0.020" ± 0.0015"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
3. DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
4. DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

- wideband, 1-500 MHz
- high isolation, 30 dB typ.
- good input port matching VSWR, 1.12 typ.
- good output port matching VSWR, 1.10 typ.
- small surface mount package

Applications

- VHF-TV
- aircraft communications



CASE STYLE: CJ725
PRICE: \$14.95 ea. QTY (10-49)

+ 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.

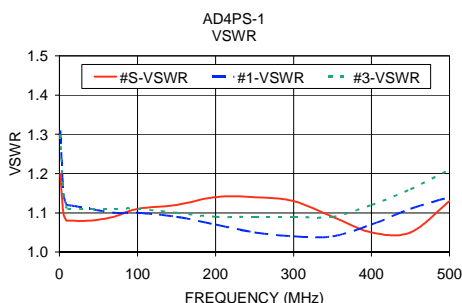
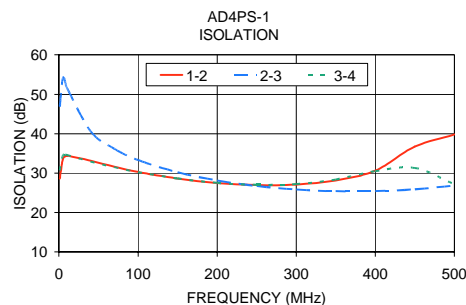
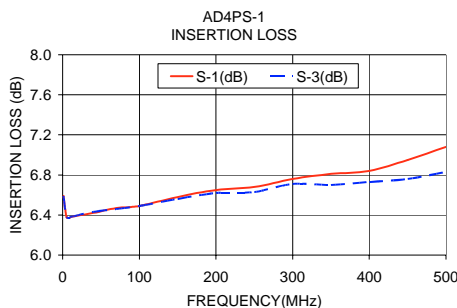
Splitter Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 6 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.
1-500	32	18	30	20	25	18	0.4	1.2	0.5	1.2	0.8	1.8	2	5	7	0.4	0.5	0.8

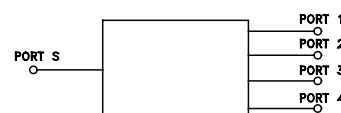
L= 1-10 MHz M=10-250 MHz U=250-500 MHz

Typical Performance Data

Freq. (MHz)	Insertion Loss (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						
1.00	6.59	6.59	6.59	6.59	0.01	28.61	46.82	30.70	0.02	1.20	1.31	1.31	1.30	1.28
5.00	6.38	6.42	6.38	6.38	0.04	33.63	54.15	34.52	0.05	1.10	1.15	1.15	1.15	1.13
9.00	6.37	6.42	6.37	6.37	0.05	34.35	52.09	34.63	0.08	1.08	1.12	1.12	1.12	1.10
10.00	6.38	6.42	6.38	6.38	0.04	34.41	51.62	34.60	0.09	1.08	1.12	1.12	1.11	1.10
40.00	6.42	6.47	6.43	6.43	0.04	33.14	40.57	32.89	0.28	1.08	1.11	1.11	1.11	1.09
70.00	6.47	6.50	6.46	6.46	0.04	31.60	36.15	31.47	0.52	1.09	1.10	1.11	1.11	1.09
100.00	6.49	6.53	6.49	6.49	0.04	30.28	33.28	30.23	0.71	1.11	1.10	1.10	1.11	1.09
150.00	6.58	6.61	6.56	6.56	0.05	28.63	30.21	28.64	1.04	1.12	1.09	1.10	1.10	1.08
200.00	6.65	6.68	6.62	6.62	0.05	27.48	28.12	27.52	1.47	1.14	1.07	1.08	1.09	1.07
250.00	6.68	6.71	6.63	6.62	0.09	26.98	26.73	27.02	1.66	1.14	1.05	1.07	1.09	1.06
300.00	6.76	6.80	6.71	6.70	0.10	27.10	25.83	27.23	1.99	1.13	1.04	1.06	1.09	1.06
350.00	6.81	6.83	6.70	6.68	0.15	28.13	25.41	28.36	2.08	1.09	1.04	1.06	1.09	1.06
400.00	6.84	6.90	6.73	6.68	0.21	30.62	25.41	30.49	2.21	1.05	1.07	1.08	1.12	1.09
450.00	6.95	6.98	6.76	6.73	0.26	36.71	25.89	31.30	2.54	1.05	1.11	1.11	1.16	1.12
500.00	7.08	7.15	6.83	6.77	0.38	39.78	26.85	27.20	3.34	1.13	1.14	1.15	1.21	1.17



electrical schematic



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