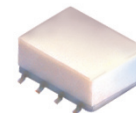


Surface Mount Power Splitter/Combiner

AD5PS-1+

5 Way-0° 50Ω 1 to 400 MHz



Maximum Ratings

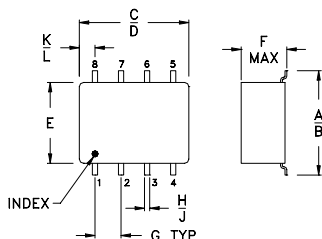
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	0.5W max.
Internal Dissipation	0.4W max.

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

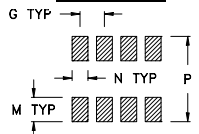
Pin Connections

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

Outline Drawing



PCB Land Pattern

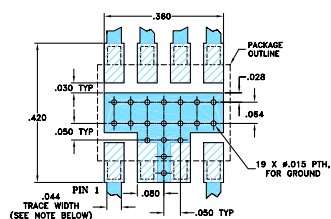


Suggested Layout,
Tolerance to be within ±0.02

Outline Dimensions (inch/mm)

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

Demo Board MCL P/N: TB-82 Suggested PCB Layout (PL-088)



NOTE: TRACE WIDTH IS SHOWN FOR ROGERS RO4350 WITH DIELECTRIC THICKNESS 0.020" ± 0.0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.

- DENOTES PCB COPPER LAYOUT
- DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

- wideband, 1 to 400 MHz
- high isolation, 27 dB typ.
- good input port matching VSWR, 1.22 typ.
- good output port matching VSWR, 1.12 typ.
- small surface mount package

Applications

- VHF-TV
- aircraft communications

CASE STYLE: CJ725

PRICE: \$19.95 ea. QTY. (10-49)

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

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

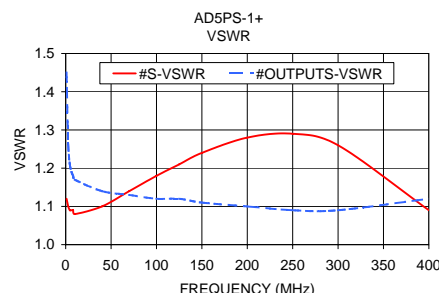
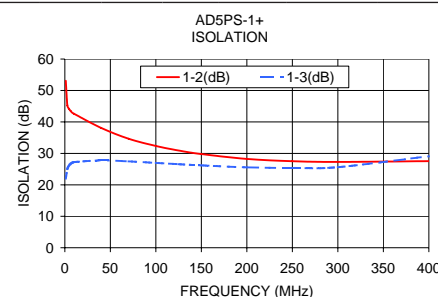
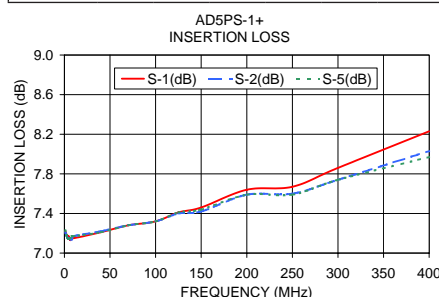
Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 7.0 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.
1-400	35	18	25	20	27	20	0.15	0.5	0.3	1.0	0.8	1.8	1	6	9	0.3	0.4	0.6

L = 1-10 MHz M = 10-200 MHz U = 200-400 MHz

Typical Performance Data

Freq. (MHz)	Insertion Loss (dB)					Amp. Unbal. (dB)	Isolation (dB)					Phase Unbal. (deg.)	VSWR S	VSWR OUTPUTS
	S-1	S-2	S-3	S-4	S-5		1-2	1-3	2-3	3-5	4-5			
1.00	7.22	7.21	7.23	7.21	7.23	0.02	53.10	21.98	39.65	21.51	33.16	0.22	1.12	1.45
2.80	7.18	7.16	7.15	7.16	7.16	0.03	45.24	25.05	43.27	24.73	38.07	0.13	1.10	1.26
4.60	7.17	7.15	7.14	7.16	7.14	0.03	44.17	26.12	44.25	25.93	40.51	0.26	1.09	1.21
6.40	7.13	7.14	7.14	7.16	7.15	0.03	43.48	26.69	44.52	26.55	41.81	0.24	1.09	1.19
8.20	7.16	7.14	7.17	7.16	7.17	0.03	42.90	27.02	44.57	26.94	42.66	0.24	1.09	1.18
10.00	7.15	7.17	7.14	7.16	7.17	0.03	42.60	27.25	44.11	27.17	43.01	0.17	1.08	1.17
40.00	7.21	7.22	7.22	7.19	7.21	0.03	38.08	27.77	38.44	27.75	37.68	0.85	1.10	1.14
70.00	7.28	7.28	7.29	7.29	7.28	0.01	34.66	27.46	34.77	27.36	33.71	1.42	1.14	1.13
100.00	7.32	7.32	7.30	7.31	7.32	0.02	32.37	26.97	32.32	26.77	31.14	2.12	1.18	1.12
125.00	7.41	7.40	7.40	7.41	7.41	0.02	30.92	26.57	30.86	26.33	29.64	2.27	1.21	1.12
150.00	7.46	7.42	7.40	7.41	7.44	0.07	29.80	26.19	29.75	25.89	28.46	2.89	1.24	1.11
200.00	7.64	7.59	7.56	7.55	7.59	0.09	28.24	25.57	28.17	25.17	26.79	3.75	1.28	1.10
250.00	7.67	7.60	7.54	7.55	7.59	0.12	27.51	25.39	27.46	24.88	25.94	4.46	1.29	1.09
300.00	7.86	7.74	7.69	7.69	7.74	0.18	27.29	25.61	27.29	25.03	25.56	5.14	1.26	1.09
400.00	8.23	8.03	7.90	7.88	7.97	0.34	27.54	29.08	27.87	27.64	25.67	6.12	1.09	1.12



electrical schematic



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