

Power Splitter/Combiner

Features

- wideband, 5-500 MHz
- high isolation
- good input port matching
- good output port matching
- small surface mount package

Applications

- VHF-TV
- aircraft communications

JY-AD4PS-1+



4 Way-0° 50Ω 5 to 500 MHz

electrical schematic



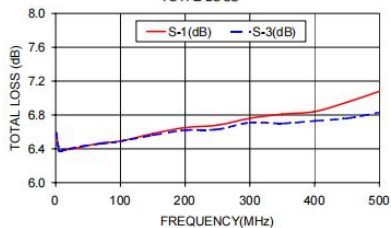
Transformer Electrical Specifications

Freq. range (MHz)	Isolation(dB)		Insertion Loss (dB) Above 6.0 dB.		Phase Unbalance (Degrees)		Amplitude Unbalance (dB)	
	min	max	min	max	min	Max.	min	Max.
5-500	18	32	0.4	1.8	2	7	0.4	0.8

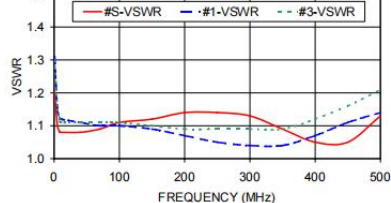
Typical Performance Data(TEST CONDITIONS: INPUT POWER = 0dBm @Temperature = +25°C)

Freq.(M Hz)	Total Loss (dB)			Amp. Unbal. (dB)	Isolation(dB)			PhaseUnb al.(deg.)	VSWRS			
	S-1	S-2	S-3		1-2	2-3	3-4		S	1	2	3
5	6.38	6.42	6.38	0.04	33.63	54.15	34.52	0.05	1.50	1.55	1.58	1.68
9	6.37	6.42	6.37	0.05	34.35	52.09	34.63	0.08	1.60	1.61	1.61	1.70
10	6.38	6.42	6.38	0.04	34.41	51.62	34.60	0.09	1.62	1.62	1.62	1.71
40	6.42	6.47	6.43	0.04	33.14	40.57	32.89	0.28	1.63	1.64	1.65	1.71
70	6.47	6.50	6.46	0.04	31.60	36.15	31.47	0.52	1.66	1.67	1.68	1.73
100	6.49	6.53	6.49	0.04	30.28	33.28	30.23	0.71	1.65	1.68	1.69	1.72
150	6.58	6.61	6.56	0.05	28.63	30.21	28.64	1.04	1.68	1.68	1.69	1.74
200	6.65	6.68	6.62	0.05	27.48	28.12	27.52	1.47	1.69	1.69	1.70	1.75
250	6.68	6.71	6.63	0.09	26.98	26.73	27.02	1.66	1.71	1.72	1.72	1.78
300	6.76	6.80	6.71	0.10	27.10	25.83	27.23	1.99	1.70	1.73	1.74	1.80
350	6.81	6.83	6.70	0.15	28.13	25.41	28.36	2.08	1.70	1.74	1.74	1.81
400	6.84	6.90	6.73	0.21	30.62	25.41	30.49	2.21	1.78	1.78	1.79	1.82
450	6.95	6.98	6.76	0.26	36.71	25.89	31.30	2.54	1.79	1.79	1.80	1.83
500	7.08	7.15	6.83	0.38	39.78	26.85	27.20	3.34	1.80	1.88	1.82	1.84

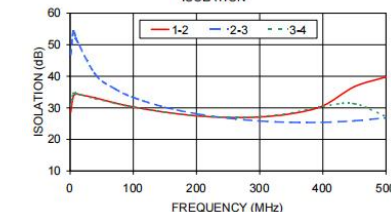
TOTAL LOSS



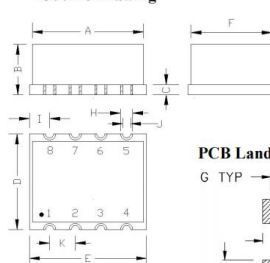
VSWR



ISOLATION



Outline Drawing



Suggested Layout,
Tolerance to be within ± 0.2

Outline Dimensions: Unit (mm)

A	10.00	G	2.54
B	5.10	H	1.21
C	1.00	I	2.00
D	9.5	J	0.80
E	11.80	K	2.54
F	8.00	M	2.0
N	1.52	P	10.67

Pin Connections

SUM PORT	2 (input)
PORT 1	8 (output1)
PORT 2	7 (output2)
PORT 3	6 (output3)
PORT 4	5 (output3)
GROUND	1, 3, 4

Maximum Ratings

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

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