

# Power Splitter/Combiner

## HT-AD3PS-1+

### Features

- wideband, 1 to 300 MHz
- high isolation, 28 dB typ.
- good input port matching VSWR, 1.2 typ.
- good output port matching VSWR, 1.18 typ.
- small surface mount package

### Applications

- VHF-TV
- aircraft communications



3 Way-0° 50Ω 1 to 300 MHz

electrical schematic



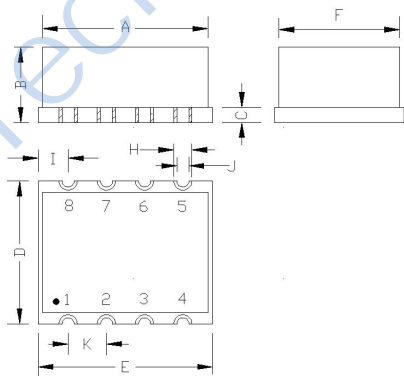
### Transformer Electrical Specifications

Freq. range (MHz)	Isolation(dB)		Insertion Loss (dB) Above 4.8 dB.		Phase Unbalance (Degrees) Max.	Amplitude Unbalance(dB) Max.
	min	max	min	max		
1~300	18	29	0.8	1.5	6	0.5

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

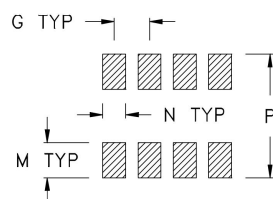
Freq.(MHz)	Total Loss (dB)			Amp. Unbal. (dB)	Isolation(dB)			PhaseUnbal. (deg.)	VSWRS			
	S-1	S-2	S-3		1-2	1-3	2-3		S	1	2	3
1.0	-5.03	-5.03	-5.03	0.08	-28.7	-27.6	-27.6	0.02	1.36	1.38	1.38	1.37
10.0	-4.99	-4.99	-4.99	0.08	-28.8	-27.8	-27.7	0.05	1.09	1.10	1.10	1.08
40.0	-4.95	-4.95	-4.94	0.08	-28.3	-27.3	-27.2	0.01	1.10	1.11	1.11	1.09
100.0	-4.98	-4.95	-4.95	0.07	-26.3	-25.8	-25.2	0.01	1.15	1.15	1.15	1.15
200.0	-5.16	-5.06	-5.04	0.07	-22.9	-22.8	-21.7	0.05	1.20	1.18	1.18	1.19
240.0	-5.24	-5.12	-5.09	0.07	-21.9	-21.9	-20.7	0.09	1.20	1.18	1.18	1.19
280.0	-5.34	-5.17	-5.12	0.07	-21.0	-21.0	-19.7	0.13	1.19	1.17	1.17	1.18
300.0	-5.38	-5.19	-5.13	0.07	-20.6	-20.6	-19.3	0.15	1.19	1.18	1.18	1.19
350.0	-5.58	-5.31	-5.22	0.07	-19.6	-19.6	-18.3	0.15	1.24	1.23	1.23	1.24

### Outline Drawing



Suggested Layout, Tolerance to be within ±0.2

### PCB Land Pattern



### Pin Connections

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

### 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	0.3W max.

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

Outline Dimensions: Unit ( mm )			
A	10.00	G	2.54
B	5.00	H	1.21
C	1.00	I	2.00
D	9.5	J	0.80
E	11.60	K	2.54
F	8.00	M	3.05
N	1.52	P	10.67

