

# Power Splitter/Combiner

## Features

- wideband, 2 to 500 MHz
- low insertion loss, 0.3 dB typ.
- high isolation, 32 dB typ.

## Applications

- VHF/UHF
- communications systems
- receivers & transmitters
- instrumentation

HT-SYPS-2-1+



2 Way-0° 50Ω 2 to 500 MHz  
electrical schematic



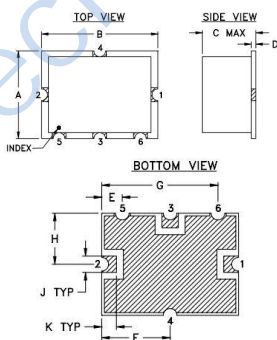
## Transformer Electrical Specifications

Freq. range (MHz)	Isolation(dB)		Insertion Loss (dB) Above 3.0 dB.		Phase Unbalance (Degrees)	Amplitude Unbalance (dB)
	min	max	min	max		
2-500	20	40	0.2	1.0	2.0-4.0	0.2-0.5

## 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	1	2
2.84	3.12	3.12	0.00	36.81	0.01	1.02	1.12	1.06
4.47	3.11	3.12	0.00	40.46	0.02	1.02	1.11	1.05
7.03	3.11	3.11	0.00	44.30	0.01	1.02	1.10	1.04
10.86	3.13	3.12	0.01	46.85	0.03	1.02	1.10	1.04
26.91	3.13	3.14	0.00	44.74	0.07	1.03	1.10	1.04
49.59	3.16	3.15	0.00	41.78	0.08	1.03	1.10	1.04
66.66	3.16	3.15	0.00	40.46	0.18	1.03	1.10	1.04
100.87	3.17	3.17	0.00	38.79	0.28	1.04	1.09	1.04
149.64	3.21	3.22	0.01	37.29	0.35	1.04	1.09	1.04
161.93	3.21	3.23	0.01	37.11	0.39	1.04	1.09	1.04
201.16	3.22	3.25	0.03	36.51	0.47	1.05	1.08	1.03
249.89	3.24	3.28	0.04	36.36	0.52	1.06	1.07	1.03
254.94	3.24	3.27	0.03	36.38	0.59	1.06	1.07	1.03
479.07	3.30	3.50	0.20	37.41	0.80	1.18	1.10	1.10
498.34	3.35	3.57	0.22	35.04	0.75	1.20	1.12	1.12

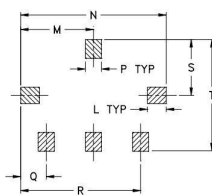
## Outline Drawing



### Outline Dimensions: Unit (mm)

A	9.65	K	1.27
B	12.70	L	1.78
C	5.84	M	6.86
D	0.51	N	13.72
E	1.91	P	1.52
F	6.35	Q	2.41
G	10.80	R	11.30
H	4.75	S	5.28
J	1.27	T	10.54
WT		0.8	

## PCB Land Pattern



### Pin Connections

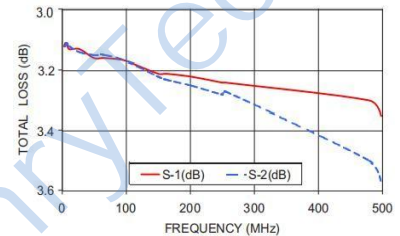
SUM PORT	3
PORT 1	1
PORT 2	2
GROUND	4,5,6

### Maximum Ratings

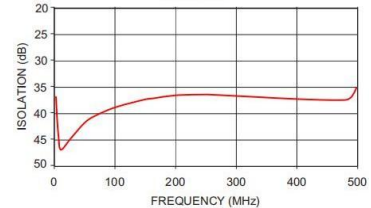
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1 W max.
Internal Dissipation	0.125W max.

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

TOTAL LOSS



ISOLATION



VSWR

