

Power Splitter/Combiner

HT-LRPS-2-1+



2 Way-0° 50Ω 5 to 500 MHz

electrical schematic



Features

- wideband, 5~500 MHz
- high isolation, 33 dB typ.
- good matching VSWR, 1.1 typ.
- excellent amplitude unbalance, 0.3 dB typ.

Applications

- cellular
- defense & federal communications

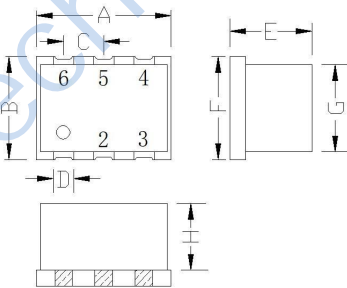
Transformer Electrical Specifications

Freq. range (MHz)	Isolation(dB)		Insertion Loss (dB) Above 4.8 dB.		Phase Unbalance (Degrees) Max.	Amplitude Unbalance(dB) Max.
	min	max	min	max		
5~500	23	33	0.4	0.8	3	0.3

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

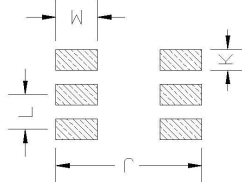
Freq. (MHz)	Total Loss (dB)		Amp. Unbal. (dB)	Isolation(dB)	PhaseUnbal.(de g.)	VSWRS		
	S-1	S-2				S	1	2
5.0	3.21	3.22	0.00	44.7	0.01	1.09	1.17	1.17
20.0	3.24	3.23	0.01	45.5	0.01	1.09	1.16	1.16
50.0	3.26	3.26	0.01	38.0	0.05	1.10	1.15	1.15
100.0	3.29	3.29	0.01	33.6	0.15	1.11	1.15	1.15
150.0	3.33	3.32	0.01	31.1	0.17	1.12	1.14	1.14
200.0	3.37	3.35	0.01	29.6	0.27	1.13	1.14	1.14
250.0	3.40	3.38	0.02	28.4	0.33	1.13	1.14	1.14
300.0	3.44	3.34	0.03	28.2	0.36	1.14	1.13	1.13
350.0	3.48	3.44	0.04	28.5	0.36	1.15	1.13	1.13
400.0	3.53	3.48	0.05	29.3	0.36	1.16	1.13	1.13
450.0	3.60	3.53	0.07	30.7	0.25	1.18	1.16	1.16
500.0	3.70	3.62	0.08	30.9	0.19	1.24	1.18	1.18

Outline Drawing



Outline Dimensions: Unit (mm)			
A	8.70	J	8.00
B	6.50	K	1.50
C	2.54	G	5.50
D	1.30	H	4.30
E	5.40	L	2.54
F	6.50	M	2.00
WT	3g		

PCB Land Pattern



Suggested L ayout, Tolerance to be within ± 0.05

Pin Connections

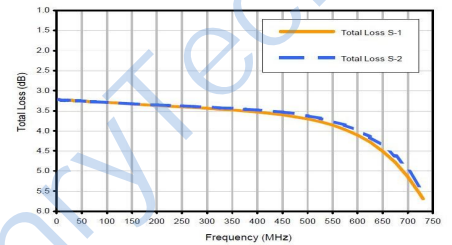
SUM PORT	1 (input)
PORT 1	3 (output1)
PORT 2	4 (output2)
GND	6
NOT USED	2,5

Maximum Ratings

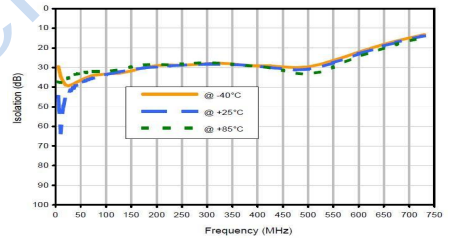
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1 W max.
Internal Dissipation	0.375W max.

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

Total Loss



Isolation 1-2 vs. TEMPERATURE



VSWR

