

Power Splitter/Combiner

HT-LRPS-3-1J



3 Way-0° 50Ω 10 to 300 MHz

electrical schematic



Features

- wideband, 10-300 MHz
- high isolation, 25 dB typ.
- good matching VSWR, 1.1 typ.
- excellent amplitude unbalance, 0.3 dB typ.

Applications

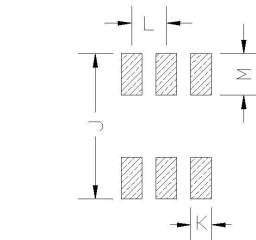
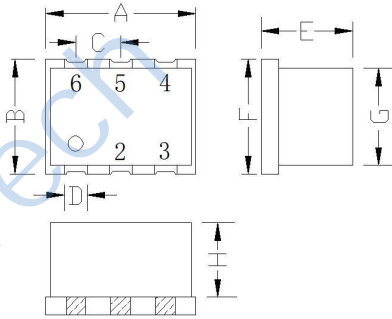
- cellular
- defense & federal communications

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		
10~300	20	25	0.4	0.8	3	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
10.0	5.03	5.04	5.04	0.01	24	24	24	0.12	1.27	1.10	1.11	1.11
30.0	5.04	5.05	5.05	0.01	24	24	24	0.27	1.25	1.08	1.08	1.08
50.0	5.06	5.06	5.06	0.00	23	24	24	0.43	1.24	1.07	1.07	1.07
100.0	5.11	5.11	5.11	0.00	23	23	23	0.81	1.23	1.06	1.06	1.06
150.0	5.17	5.17	5.15	0.02	23	23	23	1.20	1.22	1.05	1.05	1.05
200.0	5.24	5.23	5.20	0.04	23	23	23	1.56	1.20	1.06	1.05	1.04
250.0	5.32	5.30	5.25	0.07	24	24	23	1.84	1.17	1.07	1.06	1.04
300.0	5.43	5.38	5.31	0.12	26	25	25	2.11	1.16	1.10	1.10	1.05



Suggested L layout, Tolerance to be within ± 0.05

Pin Connections	
SUM PORT	1 (input)
PORT 1	6 (output1)
PORT 2	5 (output2)
PORT 3	4 (output3)
GND	2,3

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.

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

