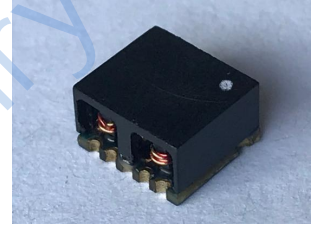


Power Splitter/Combiner

HT-SCA-4-10+



4 Way-0° 50Ω 5 to 1000 MHz

electrical schematic



Features

- wideband, 5-1000 MHz
- high isolation, 24 dB typ.
- good matching VSWR, 1.20 typ.
- excellent amplitude unbalance, 0.3 dB typ.

Applications

- cellular
- UHF/VHF receivers/transmitters

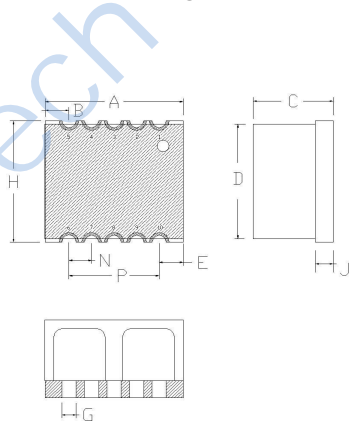
Transformer Electrical Specifications

Freq. range (MHz)	Isolation(dB)		Insertion Loss (dB) Above 6.3 dB.		Phase Unbalance (Degrees) Max.	Amplitude Unbalance(dB) Max.
	min	max	min	max		
5~1000	24	36	0.8	1.5	6	0.5

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

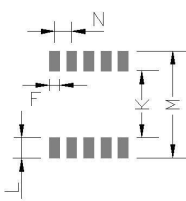
Freq. (MHz)	Total Loss (dB)				Amp. Unbal. (dB)	Isolation(dB)			PhaseUnbal. (deg.)	VSWRS				
	S-1	S-2	S-3	S-4		1-2	1-3	2-3		S	1	2	3	4
5.0	-6.39	-6.20	-6.35	-6.56	0.36	-28.9	-35.4	-35.3	0.54	1.05	1.04	1.04	1.04	1.04
150.0	-6.48	-6.31	-6.45	-6.63	0.32	-28.3	-35.6	-35.1	0.42	1.05	1.04	1.04	1.04	1.04
350.0	-6.64	-6.43	-6.56	-6.75	0.32	-26.2	-35.2	-34.4	0.82	1.14	1.13	1.13	1.13	1.13
400.0	-6.71	-6.50	-6.62	-6.80	0.30	-25.8	-35.4	-34.6	0.98	1.16	1.14	1.14	1.14	1.14
600.0	-6.94	-6.69	-6.78	-6.97	0.28	-24.7	-36.8	-34.2	1.34	1.21	1.20	1.20	1.20	1.20
700.0	-7.07	-6.81	-6.89	-7.09	0.28	-24.2	-35.8	-32.8	1.42	1.20	1.20	1.20	1.20	1.20
800.0	-7.27	-6.97	-7.02	-7.22	0.30	-24.0	-33.9	-31.5	1.62	1.17	1.18	1.18	1.18	1.18
900.0	-7.50	-7.16	-7.19	-7.40	0.34	-24.6	-32.2	-31.0	1.81	1.15	1.17	1.17	1.17	1.17
1000.0	-7.77	-7.40	-7.41	-7.63	0.37	-26.3	-30.9	-31.5	2.01	1.19	1.22	1.21	1.21	1.22

Outline Drawing



Outline Dimensions: Unit (mm)			
A	7.80	H	7.18
B	1.35	N	1.27
C	4.50	M	8.00
D	7.80	J	1.00
E	1.35	K	5.00
F	0.76	L	1.50
G	0.80	P	5.08

PCB Land Pattern



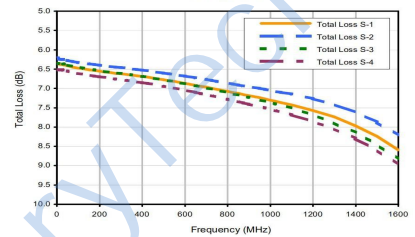
Suggested L layout, Tolerance to be within ±0.05

Pin Connections	
SUM PORT	3 (input)
PORT 1	6 (output1)
PORT 2	7 (output2)
PORT 3	9 (output3)
PORT 4	10 (output4)
GND	1,2,4,5,8

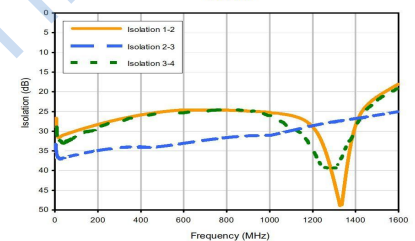
Maximum Ratings	
Operating Temperature	-20°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	0.5W max.
Internal Dissipation	0.375W max.

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

Total Loss



Isolation



VSWR

