

Power Splitter/Combiner

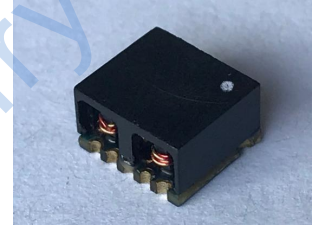
Features

- wideband, 5-600 MHz
- high isolation in Dc to 300MHz , 36 dB typ.
- good matching VSWR
- excellent amplitude unbalance, 0.3 dB typ.

Applications

- cellular
- UHF/VHF receivers/transmitters

HT-SCA-4-06



Way-0° 50Ω 5 to 600 MHz

electrical schematic



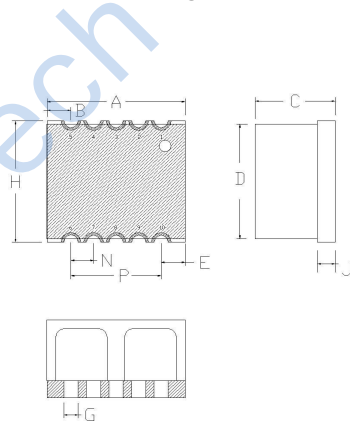
Transformer Electrical Specifications

Freq. range (MHz)	Isolation(dB)		Insertion Loss (dB) Above 6.3 dB.		Phase Unbalance (Degrees) Max.	Amplitude Unbalance(dB) Max.
	min	max	min	max		
5~600	18	42	0.2	0.8	6	0.5

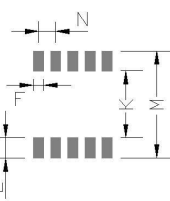
Typical Performance Data(TEST CONDITIONS: INPUT POWER = 0dBm @Temperature = +25°C)

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	-6.30	-6.14	-6.30	-6.48	0.34	-42.7	-35.8	-35.6	1	1.04	1.03	1.03	1.03	1.04
50.0	-6.27	-6.11	-6.27	-6.42	0.31	-41.5	-37.1	-37.0	1	1.04	1.03	1.03	1.03	1.04
120.0	-6.31	-6.14	-6.29	-6.45	0.31	-41.5	-37.4	-37.2	1	1.08	1.08	1.08	1.08	1.13
200.0	-6.36	-6.16	-6.31	-6.48	0.32	-44.1	-38.6	-38.3	1	1.21	1.19	1.19	1.19	1.14
300.0	-6.46	-6.26	-6.36	-6.57	0.31	-35.6	-42.6	-39.9	2	1.26	1.25	1.24	1.25	1.20
450.0	-6.68	-6.46	-6.53	-6.77	0.31	-25.0	-47.4	-36.5	3	1.37	1.33	1.32	1.33	1.20
500.0	-6.80	-6.54	-6.61	-6.85	0.31	-22.6	-43.9	-35.0	5	1.45	1.42	1.40	1.42	1.18
600.0	-7.11	-6.80	-6.88	-7.18	0.38	-18.3	-38.6	-32.6	5	1.51	1.48	1.45	1.48	1.17
700.0	-7.60	-7.29	-7.38	-7.69	0.40	-14.7	-33.7	-31.2	6	1.79	1.74	1.70	1.74	1.22

Outline Drawing



PCB Land Pattern



Suggested L layout, Tolerance to be within ±0.05

Pin Connections

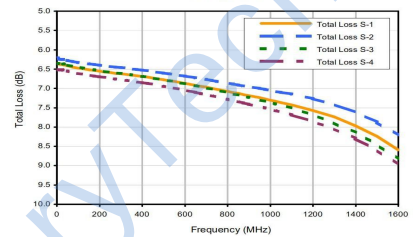
SUM PORT	3 (input)
PORT 1	6 (output1)
PORT 2	7 (output2)
PORT 3	9 (output3)
PORT 4	10 (output4)
GND	1,2,4,5,8

Maximum Ratings

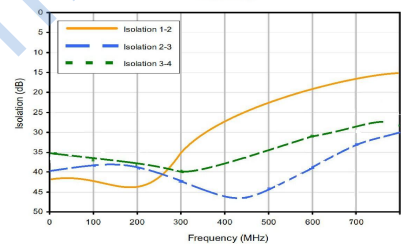
Operating Temperature	-20°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	0.5W max.
Internal Dissipation	0.375W max.

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

Total Loss



Isolation



VSWR

