

Power Splitter/Combiner

HT-SCP-2-1+



2 Way-0° 50Ω 0.1 to 400 MHz

Features

- wideband, 0.1 to 400 MHz
- low insertion loss, 0.2 dB typ.
- good isolation, 30 dB typ.
- good amplitude unbalance, 0.05 dB typ

Applications

- VHF/UHF
- instrumentation
- communication receivers & transmitters

Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)			INSERTION LOSS (dB) ABOVE 3.0 dB			PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)								
	L Typ.	M Min.	U Typ.	L Typ.	M Min.	U Typ.	L Max.	M Max.	U Max.	L Max.	M Max.	U Max.						
0.1-400	25	15	30	20	25	20	0.3	1.2	0.2	0.6	0.4	1.1	2.0	2.0	2.0	0.15	0.2	0.3

electrical schematic



Maximum Ratings

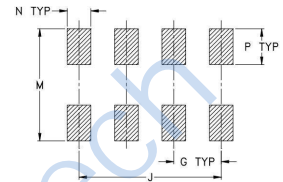
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.125W max.

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

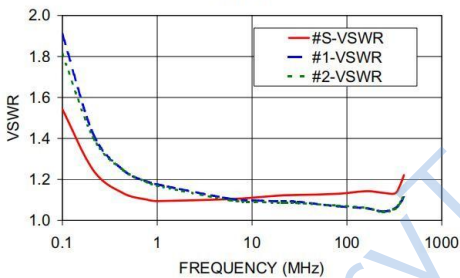
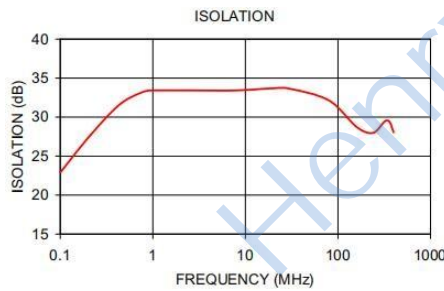
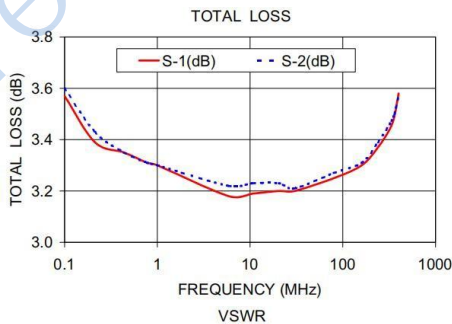
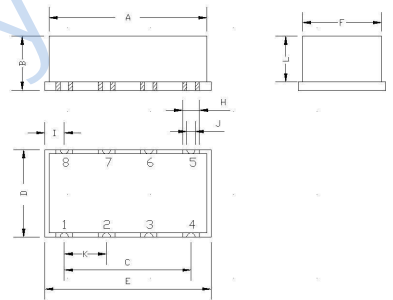
Typical Performance Data (TEST CONDITIONS: INPUT POWER = 0dBm @ Temperature = +25°C)

Freq. (MHz)	Total Loss (dB)		Amp. Unbal. (dB)	Isolation (dB)	Phase Unbal. (deg.)	VSWRS		
	S-1	S-2				S	1	2
0.10	3.57	3.60	0.03	22.88	0.28	1.54	1.91	1.81
0.21	3.39	3.43	0.03	27.70	0.11	1.24	1.42	1.40
0.44	3.35	3.35	0.01	31.60	0.08	1.13	1.25	1.25
0.78	3.31	3.31	0.01	33.21	0.09	1.10	1.19	1.19
1.00	3.30	3.30	0.01	33.43	0.06	1.09	1.18	1.17
5.88	3.18	3.22	0.04	33.40	0.20	1.10	1.11	1.10
10.75	3.19	3.23	0.04	33.49	0.18	1.11	1.10	1.09
20.50	3.20	3.23	0.04	33.70	0.03	1.12	1.09	1.09
30.25	3.20	3.21	0.01	33.64	0.11	1.12	1.09	1.08
80.00	3.25	3.27	0.02	32.14	0.02	1.13	1.07	1.07
160.00	3.30	3.31	0.02	28.71	0.12	1.14	1.06	1.06
240.00	3.37	3.39	0.02	27.98	0.10	1.13	1.04	1.04
320.00	3.44	3.46	0.02	29.46	0.15	1.13	1.06	1.06
360.00	3.49	3.50	0.00	29.42	0.29	1.17	1.08	1.08
400.00	3.58	3.57	0.01	28.04	0.34	1.22	1.11	1.13

PCB Land Pattern



Outline Drawing



Pin Connections

SUM PORT	1(input)
PORT 1	6(output1)
PORT 2	5(output1)
PORT 3	4(output1)
PORT 4	3(output1)
PORT 5	2(output1)
GROUND	7,8

Outline Dimensions: Unit (mm)

A	19.00	H	2.00
B	6.50	I	2.35
C	15.24	J	1.00
D	10.50	K	5.08
E	20.00	M	11.94
F	9.50	N	2.54
G	5.08	P	3.81