

# Power Splitter/Combiner

## HT-SC4PS-33+



4 Way-0° 50Ω 300 to 3000 MHz

### Features

- wideband, 300 to 3000 MHz, useable from 100 to 3600 MHz
- low insertion loss, 1.6 dB typ.
- good isolation, 17 dB typ.
- good amplitude unbalance, 0.4 dB typ.

### Applications

- communication systems
- CATV
- cellular, GPS, PCS
- VHF/UHF/receivers/transmitters

### Electrical Specifications at 25°C

Parameter	Frequency(MHz)	Min.	Typ.	Max.	Unit
Frequency Range		300	-	3000	MHz
Insertion Loss Above 6.0 dB	300-2700	-	1.6	3.1	dB
	2700-3000	-	2.6	3.8	
Isolation	300-3000	12	17	-	dB
Phase Unbalance	300-2700	-	7	15	Degree
	2700-3000	-	12	20	
Amplitude Unbalance	300-2700	-	0.4	0.9	dB
	2700-3000	-	0.7	1.2	
VSWR (Port S)	300-3000	-	2.1	-	:1
VSWR (Port 1-4)	300-3000	-	1.5	-	:1

### 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-3		1-2	2-3	2-4		S	1	2
300	7.20	7.22	7.09	0.03	15.56	19.89	16.67	1.15	2.46	1.28	1.28
500	7.18	7.20	7.06	0.17	15.90	21.83	17.28	1.71	2.32	1.31	1.31
700	7.26	7.28	7.11	0.21	16.14	24.40	17.66	2.06	2.29	1.38	1.38
900	7.43	7.44	7.27	0.23	16.28	27.19	17.78	2.29	2.34	1.47	1.47
1100	7.60	7.60	7.42	0.25	16.48	30.54	17.90	2.55	2.39	1.57	1.57
1300	7.71	7.67	7.49	0.28	17.02	34.52	18.43	2.93	2.35	1.65	1.65
1500	7.62	7.58	7.40	0.29	18.04	29.99	19.63	3.31	2.16	1.67	1.67
1700	7.48	7.33	7.18	0.35	20.26	23.77	22.45	3.84	1.82	1.62	1.62
1900	7.32	7.06	6.96	0.41	24.66	19.55	28.42	4.71	1.41	1.52	1.52
2100	7.29	6.94	6.90	0.45	35.91	16.89	31.12	5.70	1.12	1.41	1.41
2300	7.54	7.12	7.14	0.46	32.14	15.43	24.09	7.01	1.37	1.34	1.34
2500	7.96	7.46	7.52	0.51	25.62	14.83	20.89	8.66	1.71	1.33	1.33
2700	8.48	7.89	7.95	0.59	22.85	14.80	19.22	10.64	2.00	1.32	1.32
2900	8.95	8.25	8.26	0.77	21.31	15.32	18.31	12.58	2.21	1.29	1.29
3000	9.14	8.39	8.38	0.86	20.49	15.86	17.91	13.44	2.26	1.28	1.28

### electrical schematic



### Maximum Ratings

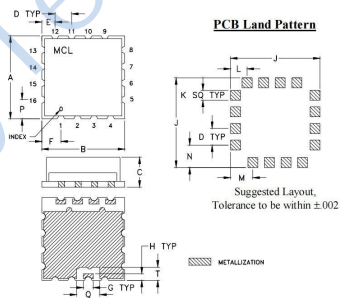
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.2W max.

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

### Pin Connections

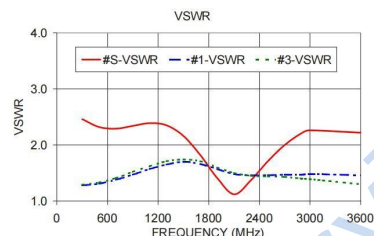
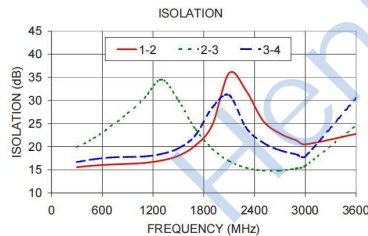
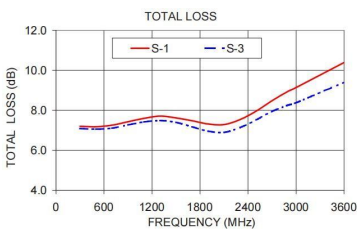
SUM PORT	10
PORT 1	1
PORT 2	2
PORT 3	3
PORT 4	4
GROUND	ALL OTHER

### Outline Drawing



### Outline Dimensions: Unit (mm)

A	12.70	B	12.70
C	4.57	D	2.54
E	2.03	F	2.92
G	1.52	H	1.02
J	13.72	K	1.52
L	2.54	M	3.43
N	3.43	P	2.92
Q	3.56	T	2.03
wt			1.0



### Demo Board MCL P/N: TB-652+ Suggested PCB Layout (PL-368)

