

Power Splitter/Combiner

HT-TCP-2-33W+

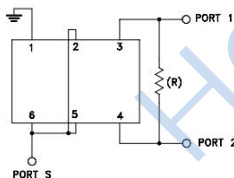
Features

- wideband frequency band, 50 to 3000 MHz
- low insertion, 1.0 dB typ.
- external resistor required
- aqueous washable
- leads for excellent solderability
- low cost

Applications

- cellular
- PCN
- GPS

Electrical Schematic



2 Way-0° 50Ω 50 to 3000 MHz

Electrical Specifications at 25°C

Parameter	Frequency(MHz)	Min.	Typ.	Max.	Unit
Frequency Range	-	50	-	3000	Mhz
Insertion Loss Above 3.0 dB	50-500	-	0.6	0.9	dB
	500-1500	-	0.9	1.3	
	1500-3000	-	1.3	2.1	
Isolation	50-500	20	30	-	dB
	500-1500	16	21	-	
	1500-3000	8	11	-	
Phase Unbalance	50-500	-	0.7	2	Degree
	500-1500	-	1.6	5	
	1500-3000	-	6.5	10	
Amplitude Unbalance	50-500	-	0.06	0.2	dB
	500-1500	-	0.4	0.6	
	1500-3000	-	0.8	1.3	
VSWR (Port S)	50-500	-	1.9	2.2	:1
	500-1500	-	1.9	2.2	
	1500-3000	-	1.8	2.1	
VSWR (Port 1-2)	50-500	-	1.9	2.2	:1
	500-1500	-	2.2	2.5	
	1500-3000	-	2.6	2.9	

Maximum Ratings

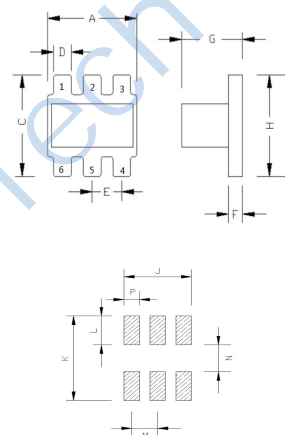
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	0.5W max

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

Pin Connections

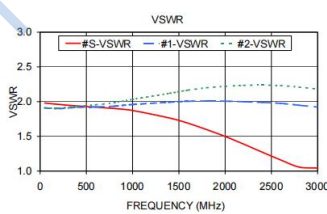
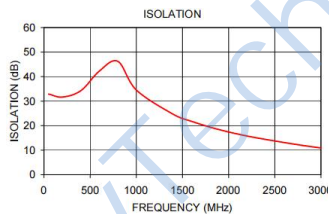
SUM PORT	2,5,6
PORT 1	3
PORT 2	4
GROUND	1
EXT. RESISTOR 475Ω	3,4

Outline Drawing



TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	Return Loss (dB)		
	S-1	S-2				S	I	2
50.00	3.55	3.55	0.00	32.87	0.06	1.98	1.91	1.91
200.00	3.59	3.60	0.01	31.65	0.23	1.96	1.90	1.90
400.00	3.61	3.65	0.03	34.27	0.44	1.94	1.92	1.93
600.00	3.62	3.69	0.07	42.24	0.63	1.92	1.92	1.95
800.00	3.61	3.73	0.12	46.22	0.82	1.90	1.93	1.99
1000.00	3.59	3.76	0.17	34.55	0.96	1.87	1.96	2.03
1400.00	3.54	3.83	0.29	24.63	1.24	1.76	1.99	2.12
1600.00	3.51	3.86	0.35	21.75	1.35	1.69	2.01	2.17
1800.00	3.47	3.87	0.40	19.39	1.56	1.60	2.01	2.20
2000.00	3.44	3.89	0.45	17.42	1.84	1.50	2.01	2.22
2200.00	3.42	3.92	0.50	15.78	2.21	1.39	2.00	2.23
2400.00	3.42	3.95	0.53	14.40	2.62	1.27	1.99	2.24
2600.00	3.43	3.97	0.54	13.12	3.15	1.16	1.97	2.23
2800.00	3.48	4.03	0.55	11.95	3.88	1.06	1.95	2.21
3000.00	3.54	4.10	0.56	10.91	4.84	1.04	1.92	2.18



Outline Dimensions (mm)

A	3.81	N	1.53
B	-	M	1.27
C	3.81	P	0.76
D	0.76	H	3.81
E	1.27	J	3.30
F	0.61	K	4.83
G	2.61	L	1.65