

### Features

- Low insertion, 0.5 dB typ.
- Excellent amplitude unbalance, 0.1 dB typ.
- Very good phase unbalance, 1.0 deg. typ.
- External resistor & capacitor required
- Aqueous washable
- Leads for excellent solderability
- Low cost

### Applications

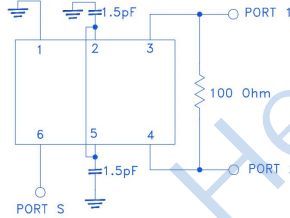
- Cellular
- VHF/UHF
- Communications systems

## HT-TCP-2-10+



50Ω 2 Way-0° 5 to 1000 MHz

### FUNCTIONAL SCHEMATIC

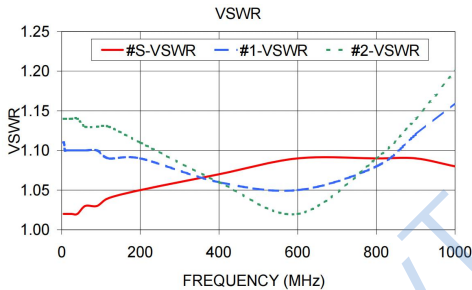
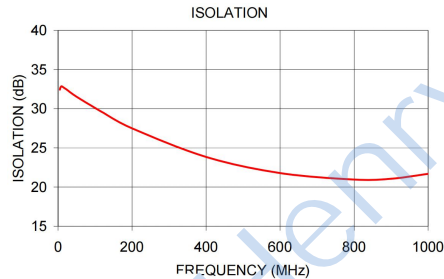
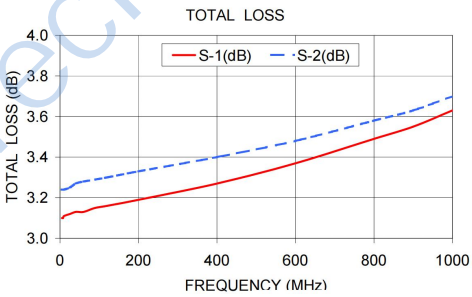


### Electrical Specifications

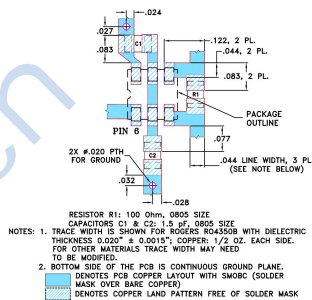
Frequency Range(MHz)	ISOLATION (dB)		INSERTION LOSS ABOVE 4.8dB		Phase Unbalance (Degrees)	Amplitude Unbalance(dB)
	Min.	Max.	Min.	Max.	Max.	Max.
5-1000	16	25	0.3	1.5	5.0	0.6

### Typical Performance Data

Freq. (MHz)	Total Loss (dB)		Amp. Unbal. (dB)	Isolation (dB)	Phase Unbal. (deg.)	VSWRS		
	S-1	S-2				S	1	2
5	-3.10	-3.24	0.14	-30.0	0.15	1.02	1.10	1.14
10	-3.11	-3.24	0.13	-28.8	0.09	1.02	1.10	1.14
50	-3.13	-3.28	0.14	-28.3	0.09	1.03	1.10	1.13
100	-3.15	-3.29	0.14	-26.3	0.10	1.03	1.03	1.11
200	-3.19	-3.33	0.14	-22.9	0.24	1.05	1.05	1.10
300	-3.27	-3.40	0.13	-21.9	0.45	1.07	1.07	1.06
500	-3.37	-3.48	0.11	-21.5	0.71	1.09	1.09	1.02
800	-3.46	-3.58	0.09	-21.4	0.98	1.09	1.09	1.08
1000	-3.63	-3.70	0.07	-21.2	1.29	1.08	1.16	1.18



### Suggested PCB Layout



### Maximum Ratings

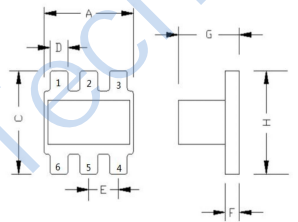
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input (as splitter)	0.5W max.

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

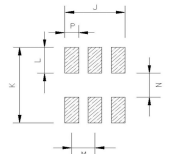
### Pin Connections

SUM PORT	6
PORT 1	3
PORT 2	4
GROUND	1
CONNECT	2,5
EXT. RESISTOR 100Ω	3,4
EXT. CAPACITOR 1.5pF	2 OR 5 TO GND

### Outline Drawing



### PCB Land Pattern



Suggested Layout, Tolerance to be within ± 0.02

### Outline Dimensions: Unit ( 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
WT			0.2g