

# Power Splitter/Combiner

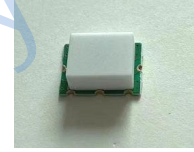
## Features

- very wideband, DC to 6800 MHz
- very good phase unbalance.
- excellent amplitude unbalance.
- rugged shielded case.

## Applications

- laboratory
- test set-ups
- PCS
- UNII
- WiMAX
- WiFi
- blue tooth

## HT-SCRP-2-682W+



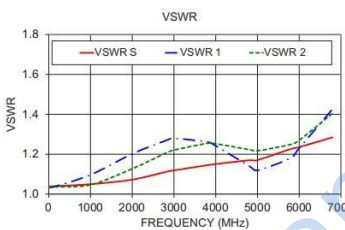
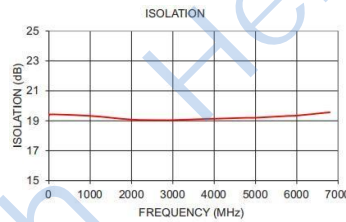
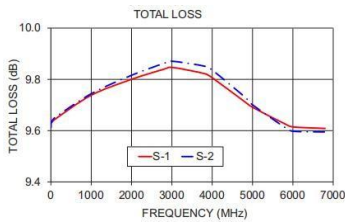
**2 Way-0° 50Ω High Isolation Resistive Splitter DC to 6800 MHz**

### Electrical Specifications at 25°C

Parameter	Frequency(MHz)	Min.	Typ.	Max.	Unit
Frequency Range		DC	-	6800	MHz
Insertion Loss Above 9.5 dB	DC-5000	-	0.5	0.9	dB
	DC-6800	-	0.8	1.6	
Isolation	DC-6800	17	19	-	dB
Phase Unbalance	DC-5000	-	1.0	4.0	Degree
	DC-6800	-	3.0	6.0	
Amplitude Unbalance	DC-5000	-	0.1	0.4	dB
	DC-6800	-	0.3	0.7	
VSWR (Port S)	DC-5000	-	1.2	1.5	:1
	DC-6800	-	1.3	1.6	
VSWR (Port 1-2)	DC-5000	-	1.3	1.5	:1
	DC-6800	-	1.5	2.2	

### Typical Performance Data

Freq. (MHz)	Total Loss (dB)		Amp. Unbal. (dB)	Isolation (dB)	Phase Unbal. (deg.)	VSWRS		
	S-1	S-2				S	1	2
0.3	9.61	9.61	0.00	19.35	0.03	1.04	1.03	1.04
1.0	9.63	9.63	0.00	19.41	0.02	1.04	1.03	1.03
10.0	9.63	9.63	0.00	19.42	0.01	1.04	1.03	1.03
100.0	9.64	9.65	0.01	19.43	0.03	1.04	1.04	1.04
1000.0	9.74	9.74	0.01	19.33	0.24	1.05	1.10	1.05
2000.0	9.80	9.82	0.02	19.08	0.49	1.07	1.20	1.13
2800.0	9.84	9.86	0.02	19.04	0.72	1.11	1.27	1.21
3000.0	9.85	9.87	0.02	19.05	0.80	1.12	1.28	1.22
3800.0	9.82	9.85	0.03	19.12	1.05	1.14	1.26	1.25
4000.0	9.81	9.84	0.03	19.13	1.14	1.15	1.24	1.25
4800.0	9.71	9.73	0.02	19.20	1.43	1.17	1.14	1.22
5000.0	9.69	9.70	0.01	19.20	1.49	1.17	1.12	1.22
5800.0	9.63	9.61	0.01	19.33	1.60	1.23	1.18	1.25
6000.0	9.61	9.60	0.02	19.35	1.59	1.24	1.23	1.27
6800.0	9.61	9.59	0.01	19.57	1.42	1.28	1.43	1.40



electrical schematic



### Maximum Ratings

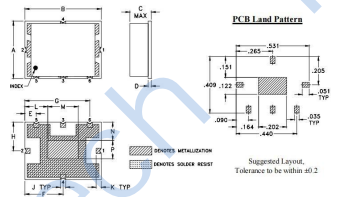
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	0.5W max.
Internal Dissipation	0.5W max.

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

### Coaxial Connections

SUM PORT	3
PORT 1	1
PORT 2	2
GROUND	ALL OTHERS

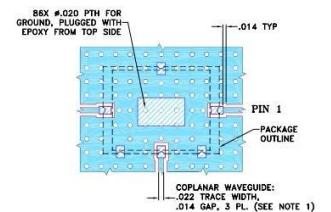
### Outline Drawing



### Outline Dimensions: Unit (mm)

A	9.65	B	12.70
C	4.62	D	0.51
E	1.91	F	6.35
G	10.8	H	4.75
J	0.89	K	0.86
L	3.81	M	5.08
N	3.05	P	3.05

### Suggested PCB Layout



- NOTES:
- TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .010" ± .001"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
  - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
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