

Power Splitter/Combiner

SCRIP-2-682W+



Generic photo used for illustration purposes only

CASE STYLE: TTT1732

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

Maximum Ratings

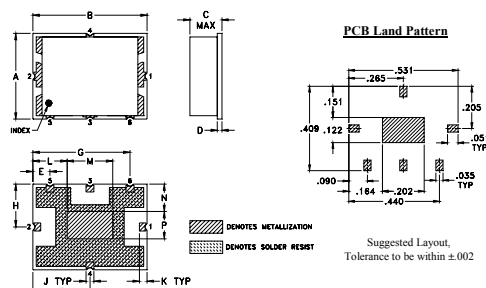
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	0.5W max.
Internal Dissipation	0.5W max.

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

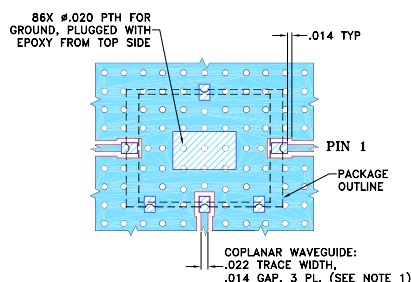
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
.38	.50	.15	.020	.075	.250	.425	.187
9.65	12.70	3.81	0.51	1.91	6.35	10.80	4.75
J	K	L	M	N	P		wt.
.035	.034	.150	.200	.120	.120		grams
0.89	0.86	3.81	5.08	3.05	3.05		0.8

Demo Board MCL P/N: TB-658+
Suggested PCB Layout (PL-376)



NOTES:

- NOTES:**
1. 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.
 2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
-  DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER).
-  DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

- very wideband, DC to 6800 MHz
- very good phase unbalance, 1 deg. typ.
- excellent amplitude unbalance, 0.1 dB typ.
- rugged shielded case

Applications

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

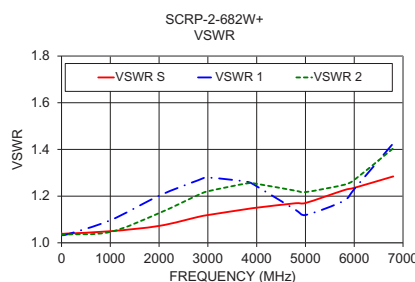
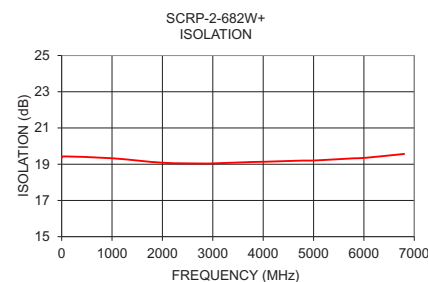
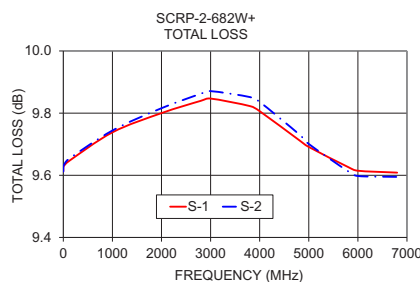
Electrical Specifications at 25°C

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

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
0.30	9.61	9.61	0.00	19.35	0.03	1.04	1.03	1.04
1.00	9.63	9.63	0.00	19.41	0.02	1.04	1.03	1.03
10.00	9.63	9.63	0.00	19.42	0.01	1.04	1.03	1.03
100.00	9.64	9.65	0.01	19.43	0.03	1.04	1.04	1.04
1000.00	9.74	9.74	0.01	19.33	0.24	1.05	1.10	1.05
2000.00	9.80	9.82	0.02	19.08	0.49	1.07	1.20	1.13
2800.00	9.84	9.86	0.02	19.04	0.72	1.11	1.27	1.21
3000.00	9.85	9.87	0.02	19.05	0.80	1.12	1.28	1.22
3800.00	9.82	9.85	0.03	19.12	1.05	1.14	1.26	1.25
4000.00	9.81	9.84	0.03	19.13	1.14	1.15	1.24	1.25
4800.00	9.71	9.73	0.02	19.20	1.43	1.17	1.14	1.22
5000.00	9.69	9.70	0.01	19.20	1.49	1.17	1.12	1.22
5800.00	9.63	9.61	0.01	19.33	1.60	1.23	1.18	1.25
6000.00	9.61	9.60	0.02	19.35	1.59	1.24	1.23	1.27
6800.00	9.61	9.59	0.01	19.57	1.42	1.28	1.43	1.40

1. Total Loss = Insertion Loss + 9.5 dB splitter theoretical loss



Electrical Schematic



Notes

- Notes**
- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
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