

Plug-In

Power Splitter/Combiner

PSCQ-2-51W+

2 Way-90° 50Ω 5 to 50 MHz

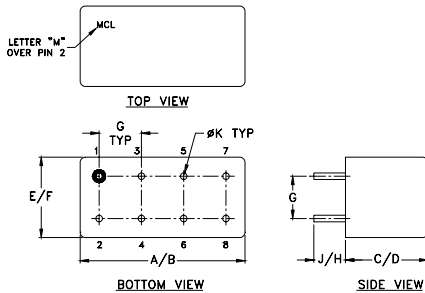
Maximum Ratings

Operating Temperature	-55°C to 100°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

SUMPORT	1
PORT 1 (0°)	5
PORT 2 (+90°)	6
GROUND	2,3,4,7,8

Outline Drawing



Outline Dimensions (inch mm)

A	B	C	D	E	F
.770	.800	.285	.310	.370	.400
19.56	20.32	7.24	7.87	9.40	10.16
G	H	J	K	wt	
.200	.20	.14	.031	grams	
5.08	5.08	3.56	0.79	5.2	

Features

- 10:1 bandwidth
- excellent amplitude unbalance, 0.15 dB typ. and phase unbalance, 1.0 deg. typ.
- very low insertion loss, 0.5 dB typ.
- excellent VSWR, 1.21 typ.
- excellent isolation, 41 dB typ.

Applications

- short wave
- land mobile

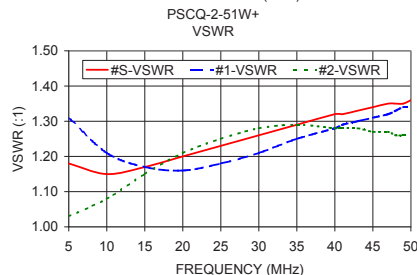
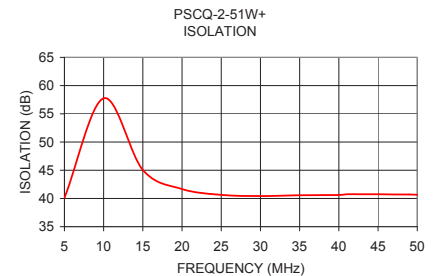
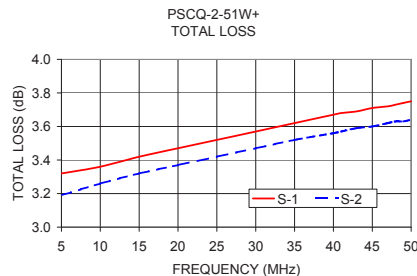
Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)	INSERTION LOSS (dB) Avg. of Coupled Outputs ABOVE 3 dB	PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
$f_L - f_U$	Typ. Min.	Typ. Max.	Max.	Max.
5-50	41 30	0.5 1.0	5.0	0.5

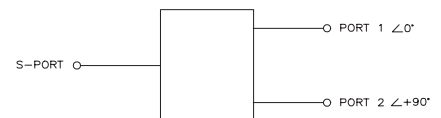
Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
5.00	3.32	3.19	0.13	40.09	89.18	1.18	1.31	1.03
10.00	3.36	3.26	0.10	57.75	87.49	1.15	1.21	1.08
15.00	3.42	3.32	0.10	45.05	87.36	1.17	1.17	1.15
20.00	3.47	3.37	0.10	41.67	88.47	1.20	1.16	1.21
25.00	3.52	3.42	0.10	40.64	89.30	1.23	1.18	1.25
30.00	3.57	3.47	0.10	40.43	89.51	1.26	1.21	1.28
35.00	3.62	3.52	0.10	40.57	89.16	1.29	1.25	1.29
40.00	3.67	3.56	0.10	40.61	88.38	1.32	1.28	1.28
41.00	3.68	3.57	0.10	40.75	88.19	1.32	1.29	1.28
43.00	3.69	3.59	0.10	40.75	87.78	1.33	1.30	1.28
45.00	3.71	3.60	0.10	40.75	87.34	1.34	1.31	1.27
47.00	3.72	3.62	0.10	40.71	86.89	1.35	1.32	1.27
48.00	3.73	3.63	0.10	40.70	86.65	1.35	1.33	1.26
49.00	3.74	3.63	0.10	40.71	86.42	1.35	1.34	1.26
50.00	3.75	3.64	0.10	40.65	86.19	1.36	1.34	1.26

1. Total Loss = Insertion Loss + 3dB splitter loss.



electrical schematic



Notes

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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