

Plug-In

Power Splitter/Combiner

PSCQ-2-21.4+

2 Way-90° 50Ω 20 to 23 MHz

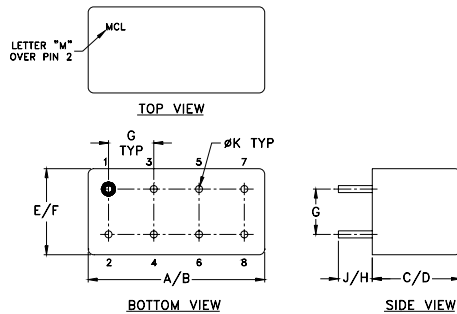
Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Permanent damage may occur if any of these limits are exceeded.	

Pin Connections

SUM PORT	1
PORT 1 (+90°)	2
PORT 2 (0°)	5
GROUND	3,4,7,8
CASE GROUND	3,4,7,8
50 OHM TERM EXTERNAL	6

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F
.770	.800	.385	.400	.370	.400
19.56	20.32	9.78	10.16	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

- low insertion loss, 0.4 dB typ.
- excellent isolation, 30 dB typ.
- excellent phase unbalance, 1 deg. Typ.
- excellent VSWR, 1.10:1 typ.
- rugged shielded case

Applications

- modulators
- balanced amplifiers

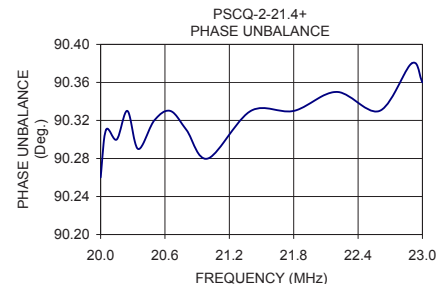
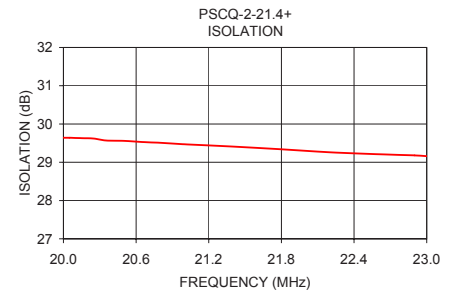
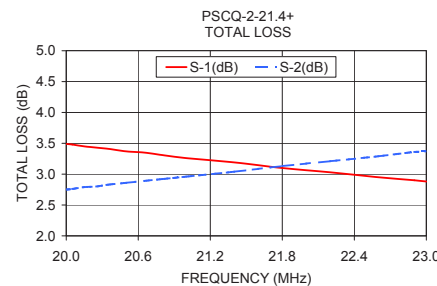
Electrical Specifications

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.
20-23	30 25	0.4 0.7	3	1.2

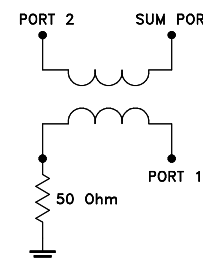
Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
20.00	3.49	2.75	0.74	29.64	90.26	1.02	1.02	1.08
20.05	3.48	2.76	0.71	29.64	90.31	1.02	1.02	1.08
20.15	3.45	2.79	0.67	29.63	90.30	1.02	1.02	1.08
20.25	3.43	2.80	0.63	29.62	90.33	1.02	1.02	1.08
20.35	3.41	2.83	0.58	29.57	90.29	1.02	1.02	1.08
20.50	3.37	2.86	0.51	29.56	90.32	1.02	1.02	1.08
20.65	3.35	2.89	0.46	29.53	90.33	1.02	1.02	1.09
20.80	3.31	2.92	0.39	29.51	90.31	1.02	1.02	1.09
21.00	3.26	2.96	0.31	29.47	90.28	1.02	1.02	1.09
21.40	3.19	3.04	0.14	29.41	90.33	1.02	1.02	1.09
21.80	3.10	3.13	0.02	29.34	90.33	1.02	1.02	1.09
22.20	3.03	3.21	0.18	29.26	90.35	1.02	1.02	1.09
22.60	2.95	3.29	0.34	29.21	90.33	1.02	1.02	1.10
22.90	2.90	3.36	0.46	29.18	90.38	1.02	1.03	1.10
23.00	2.88	3.37	0.50	29.16	90.36	1.02	1.03	1.10

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



electrical schematic



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.
- B. 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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