

Plug-In

Power Splitter/Combiner

PSCQ-2-0.455+

2 Way-90° 50Ω 0.42 to 0.51 MHz

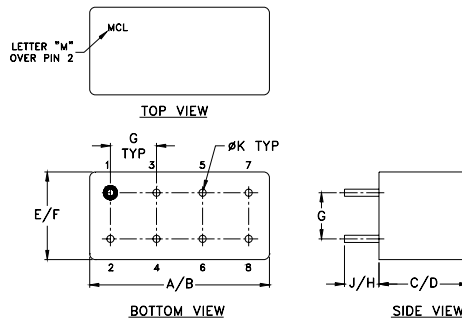
Maximum Ratings

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)

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, 0.1 dB typ.
- good isolation, 30 dB typ.
- excellent phase unbalance, 1 deg. typ.
- excellent VSWR, 1.05:1 typ.
- rugged shielded case

Applications

- modulators
- balanced amplifiers

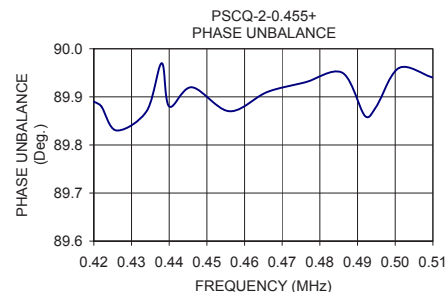
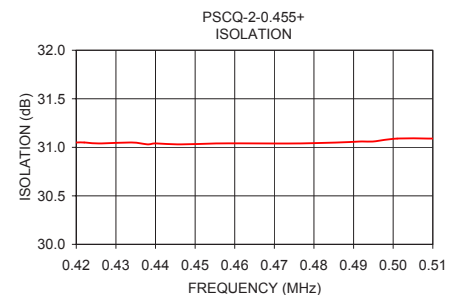
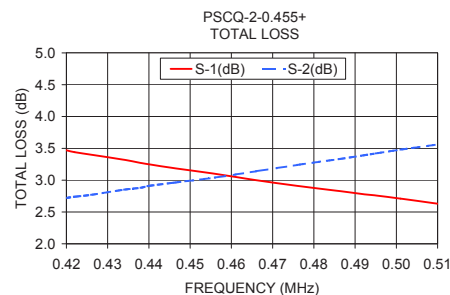
Electrical Specifications

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.
0.42-0.51	30 25	0.1 0.5	3	1.2

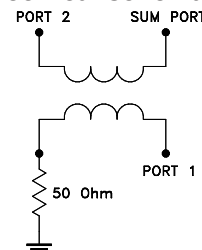
Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
0.42	3.47	2.72	0.75	31.05	89.89	1.04	1.04	1.05
0.42	3.44	2.74	0.71	31.05	89.88	1.04	1.04	1.05
0.43	3.40	2.77	0.63	31.04	89.83	1.04	1.04	1.05
0.43	3.32	2.85	0.47	31.05	89.87	1.04	1.04	1.05
0.44	3.27	2.88	0.39	31.03	89.97	1.04	1.04	1.05
0.44	3.25	2.91	0.34	31.04	89.88	1.04	1.04	1.05
0.45	3.19	2.96	0.24	31.03	89.92	1.04	1.04	1.05
0.46	3.10	3.04	0.05	31.04	89.87	1.04	1.04	1.05
0.47	3.00	3.14	0.15	31.04	89.91	1.04	1.04	1.05
0.48	2.91	3.24	0.33	31.04	89.93	1.04	1.04	1.05
0.49	2.83	3.33	0.50	31.05	89.95	1.04	1.04	1.05
0.49	2.78	3.39	0.61	31.06	89.86	1.04	1.04	1.05
0.50	2.76	3.42	0.66	31.06	89.88	1.04	1.04	1.05
0.50	2.71	3.48	0.77	31.09	89.96	1.04	1.04	1.05
0.51	2.63	3.56	0.93	31.09	89.94	1.04	1.04	1.05

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-Circuits' applicable established test performance criteria and measurement instructions.
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