

# Plug-In Power Splitter/Combiner

## PSCQ-2-4+

2 Way-90° 50Ω 3.5 to 4.5 MHz



Generic photo used for illustration purposes only

CASE STYLE: A01

**+RoHS Compliant**

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

### 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

### Features

- low insertion loss, 0.1 dB typ.
- good isolation, 30 dB typ.
- excellent VSWR, 1.05:1 typ.
- rugged shielded case

### Applications

- modulators
- balanced amplifiers

### Electrical Specifications

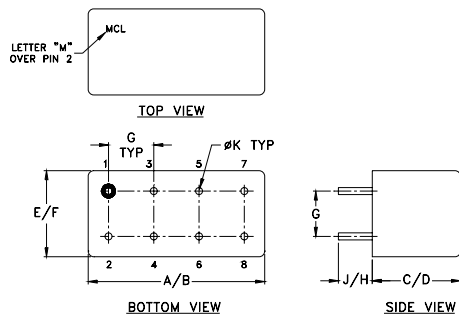
FREQ. RANGE (MHz)	ISOLATION (dB)	INSERTION LOSS (dB) Avg. of Coupled Outputs ABOVE 3 dB	PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
$f_L$ - $f_U$	Typ. Min.	Typ. Max.	Max.	Max.
3.5-4.5	36 25	0.4 0.7	3	1.5

### Typical Performance Data

Frequency (MHz)	Total Loss <sup>1</sup> (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
3.50	3.60	2.66	1.00	41.97	89.65	1.01	1.01	1.02
3.55	3.54	2.71	0.88	41.87	89.63	1.01	1.01	1.02
3.60	3.47	2.77	0.76	41.78	89.66	1.01	1.01	1.02
3.70	3.34	2.88	0.52	41.53	89.64	1.01	1.01	1.02
3.75	3.29	2.94	0.41	41.47	89.63	1.01	1.01	1.02
3.80	3.22	2.99	0.29	41.39	89.64	1.01	1.01	1.02
3.85	3.16	3.05	0.18	41.26	89.61	1.01	1.01	1.02
3.90	3.11	3.11	0.07	41.15	89.62	1.01	1.01	1.02
3.95	3.06	3.16	0.04	41.09	89.62	1.01	1.01	1.02
4.00	3.01	3.22	0.15	40.97	89.64	1.01	1.01	1.02
4.05	2.95	3.28	0.26	40.91	89.61	1.01	1.01	1.02
4.10	2.90	3.33	0.36	40.83	89.61	1.01	1.01	1.02
4.20	2.80	3.44	0.57	40.67	89.62	1.01	1.01	1.01
4.30	2.71	3.48	0.77	40.51	89.62	1.01	1.01	1.01
4.50	2.54	3.70	1.16	40.22	89.60	1.01	1.01	1.01

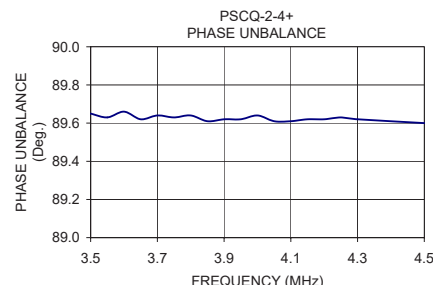
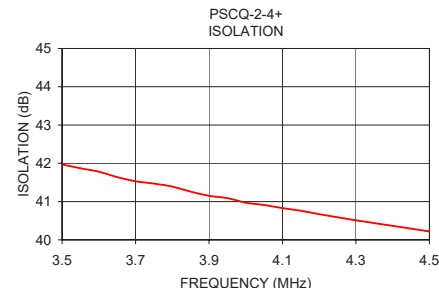
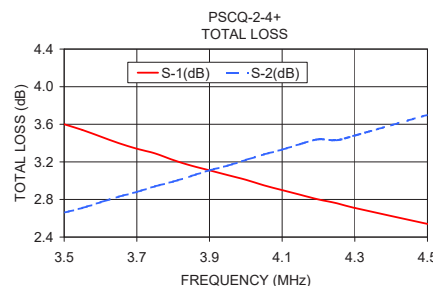
1. Total Loss = Insertion Loss + 3dB splitter loss.

### Outline Drawing

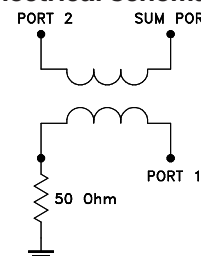


### Outline Dimensions (inch/mm)

A	B	C	D	E	F	
.770	.800	.385	.400	.370	.400	
19.56	20.32	9.78	10.16	9.40	10.16	wt
G	H	J	K			grams
.200	.20	.14	.031			5.2
5.08	5.08	3.56	0.79			



### 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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