Plug-In

Power Splitter/Combiner

PSCQ-2-70+

2 Way-90° 50Ω 40 to 70 MHz

CASE STYLE: A01

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, 0.3 dB typ.
- high isolation, 30 dB typ.
- excellent phase unbalance, 1 deg. typ.
- excellent VSWR, 1.10:1 typ.
- rugged shielded case

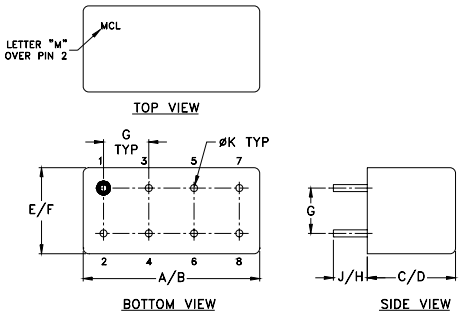
+RoHS Compliant

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

Applications

- modulators
- balanced amplifiers

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

Electrical Specifications

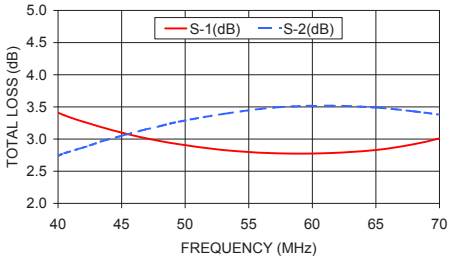
FREQ. RANGE (MHz)	ISOLATION (dB)	INSERTION LOSS (dB) Avg. of Coupled Outputs ABOVE 3 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
f_L-f_U	Typ. Min.	Typ.	Max.	Max.	Max.
40-70	30 20	0.3	0.7	3	1.5

Typical Performance Data

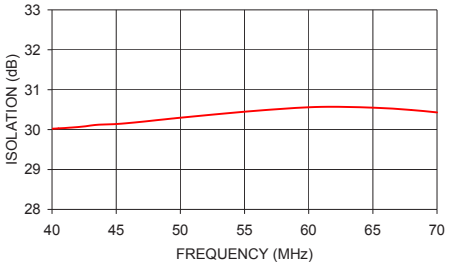
Frequency (MHz)	Total Loss[1] (dB) S-1	Total Loss[1] (dB) S-2	Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
40.00	3.41	2.74	0.67	30.02	90.13	1.03	1.04	1.05
40.50	3.37	2.78	0.59	30.03	90.10	1.03	1.04	1.05
41.50	3.30	2.84	0.46	30.05	90.14	1.03	1.04	1.05
42.50	3.24	2.90	0.34	30.08	90.16	1.03	1.04	1.05
43.50	3.18	2.97	0.21	30.12	90.18	1.03	1.04	1.05
45.00	3.10	3.05	0.06	30.14	90.23	1.03	1.04	1.05
46.50	3.03	3.13	0.10	30.18	90.22	1.03	1.04	1.05
48.00	2.97	3.20	0.23	30.23	90.29	1.02	1.03	1.05
49.50	2.92	3.27	0.35	30.28	90.32	1.02	1.03	1.05
53.00	2.83	3.39	0.56	30.39	90.38	1.02	1.03	1.04
57.00	2.78	3.49	0.71	30.50	90.43	1.02	1.03	1.04
61.00	2.78	3.52	0.75	30.57	90.57	1.03	1.04	1.04
65.00	2.83	3.49	0.66	30.55	90.71	1.04	1.04	1.03
68.00	2.92	3.43	0.52	30.49	90.83	1.05	1.05	1.03
70.00	3.01	3.38	0.37	30.43	90.92	1.06	1.05	1.03

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

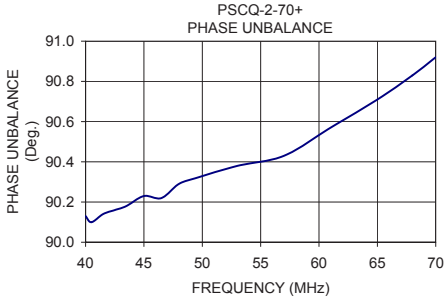
PSCQ-2-70+
TOTAL LOSS



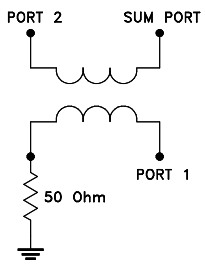
PSCQ-2-70+
ISOLATION



PSCQ-2-70+
PHASE UNBALANCE



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.
C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

REV. D
M151107
PSCQ-2-70+
HY/TD/CP/AM
150930