Plug-In

Power Splitter/Combiner

PSCQ-2-10.5+

2 Way-90° 50Ω 9 to 11 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, 0.4 dB typ.
- good high isolation, 25 dB typ.
- excellent phase unbalance, 1 deg. typ.
- excellent VSWR, 1.10:1 typ.
- rugged shielded case

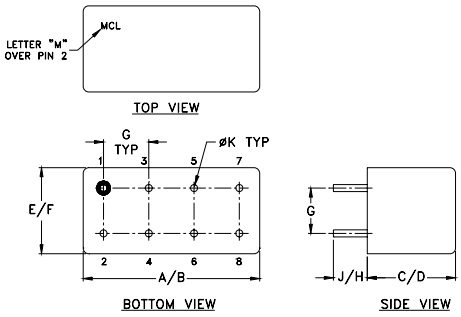
+RoHS Compliant

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

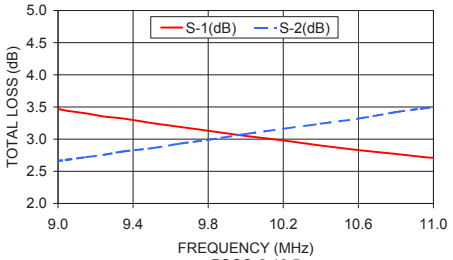
FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) Avg. of Coupled Outputs ABOVE 3 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
f_L-f_U	Typ.	Min.	Typ.	Max.	Max.	Max.
9-11	25	20	0.4	0.7	3	1.2

Typical Performance Data

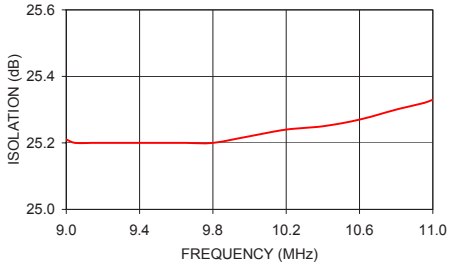
Frequency (MHz)	Total Loss[1] (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
9.00	3.47	2.66	0.81	25.21	89.68	1.09	1.10	1.10
9.05	3.44	2.68	0.76	25.20	89.73	1.09	1.10	1.10
9.15	3.40	2.72	0.68	25.20	89.70	1.09	1.10	1.10
9.25	3.35	2.76	0.59	25.20	89.76	1.09	1.10	1.10
9.35	3.32	2.81	0.51	25.20	89.74	1.09	1.10	1.10
9.50	3.25	2.86	0.39	25.20	89.73	1.09	1.10	1.10
9.65	3.19	2.93	0.26	25.20	89.71	1.09	1.10	1.10
9.80	3.13	2.99	0.14	25.20	89.76	1.09	1.10	1.10
10.00	3.05	3.08	0.03	25.22	89.74	1.09	1.10	1.10
10.20	2.98	3.16	0.19	25.24	89.77	1.09	1.10	1.10
10.40	2.90	3.24	0.34	25.25	89.78	1.09	1.10	1.10
10.60	2.83	3.32	0.49	25.27	89.77	1.09	1.10	1.10
10.80	2.77	3.42	0.64	25.30	89.77	1.09	1.10	1.10
10.95	2.72	3.48	0.75	25.32	89.79	1.09	1.10	1.10
11.00	2.71	3.50	0.79	25.33	89.79	1.09	1.10	1.10

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

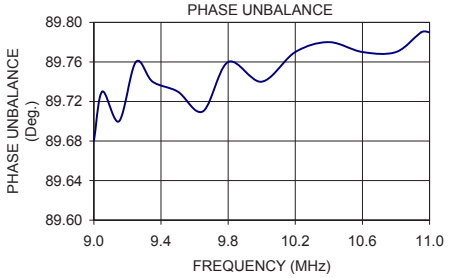
PSCQ-2-10.5+
TOTAL LOSS



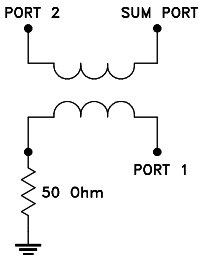
PSCQ-2-10.5+
ISOLATION



PSCQ-2-10.5+
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.
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