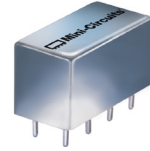


Power Splitter/Combiner

2 Way-90° 50Ω 90 to 270 MHz

PQW-2-270+



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

Features

- wideband, 90 to 270 MHz
- low insertion loss, 0.4 dB typ.
- rugged shielded case

Applications

- power combiners
- modulators
- image reject mixers

Electrical Specifications

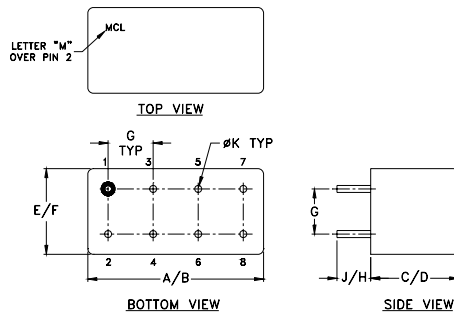
FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) Avg. of Coupled Outputs ABOVE 3 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
f_L - f_U	Typ.	Min.	Typ.	Max.	Max.	Max.
90-270	20	17	0.4	0.7	4	1.4

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						
90.00	2.85	3.71	0.86	20.15	89.86	1.17	1.22	1.20
98.18	3.07	3.46	0.39	19.75	89.99	1.18	1.24	1.21
106.36	3.29	3.30	0.01	19.47	89.98	1.19	1.26	1.22
114.54	3.46	3.17	0.29	19.21	90.09	1.20	1.27	1.23
122.72	3.61	3.04	0.57	19.01	90.15	1.21	1.29	1.24
130.90	3.73	2.96	0.77	18.88	90.17	1.22	1.30	1.25
139.09	3.83	2.90	0.93	18.79	90.20	1.22	1.31	1.25
145.45	3.98	2.83	1.15	18.73	90.18	1.22	1.33	1.25
163.63	4.02	2.81	1.21	18.79	90.14	1.22	1.33	1.25
180.00	4.01	2.80	1.21	18.98	90.09	1.20	1.33	1.24
188.18	4.01	2.81	1.20	19.14	89.99	1.19	1.33	1.22
196.36	3.96	2.85	1.11	19.34	89.90	1.18	1.32	1.21
204.54	3.92	2.89	1.03	19.58	89.75	1.17	1.31	1.19
212.72	3.86	2.95	0.91	19.78	89.66	1.15	1.30	1.17
220.90	3.79	3.01	0.78	20.03	89.54	1.14	1.28	1.15
237.27	3.63	3.20	0.43	20.36	89.25	1.13	1.26	1.09
245.45	3.52	3.31	0.21	20.36	89.13	1.13	1.25	1.06
253.63	3.42	3.44	0.02	20.24	89.23	1.16	1.24	1.03
261.81	3.33	3.60	0.27	19.96	89.11	1.19	1.25	1.03
270.00	3.23	3.78	0.55	19.50	89.15	1.23	1.26	1.07

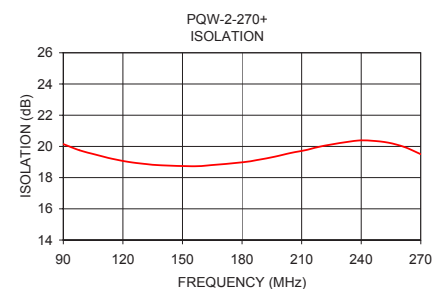
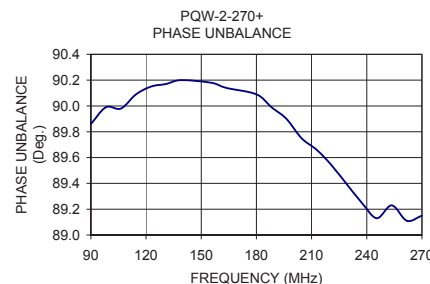
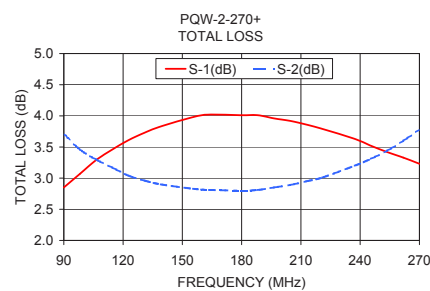
1. Total Loss = Insertion Loss + 3dB splitter loss.

Outline Drawing

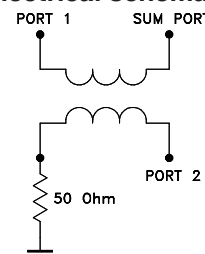


Outline Dimensions (inch/mm)

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



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

