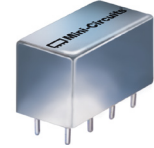


Plug-In

# Power Splitter/Combiner

PQW-2-90+

2 Way-90° 50Ω 30 to 90 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 (0°)	2
PORT 2 (+90°)	6
GROUND	3,4,7,8
CASE GROUND	3,4,7,8
50 OHM TERM EXTERNAL	5

## Features

- low insertion loss, 0.3 dB typ.
- good isolation, 27 dB typ.
- excellent VSWR, 1.15:1 typ.
- rugged shielded case

## Applications

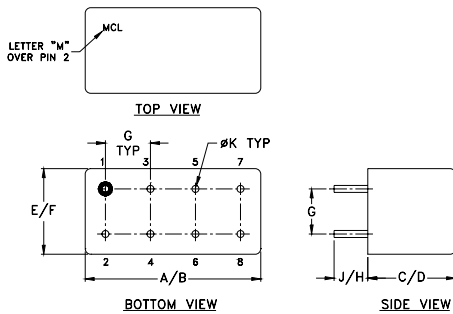
- modulators
- balanced amplifiers
- image shielded case

## Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) Avg. of Coupled Outputs less 3 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
	Typ.	Min.	Typ.	Max.		
$f_L$ - $f_U$					Max.	Max.
30-90	27	20	0.3	0.6	3	1.0

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

## Outline Drawing



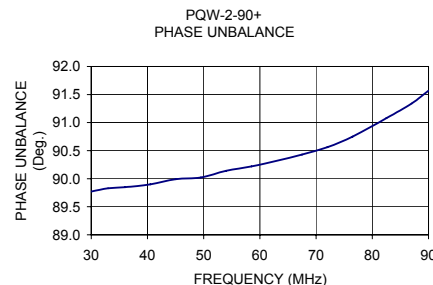
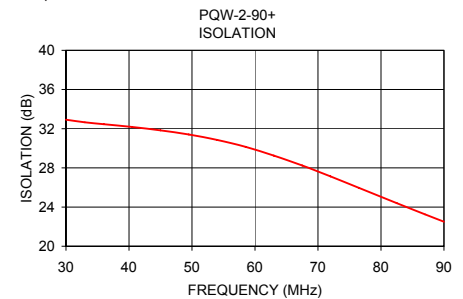
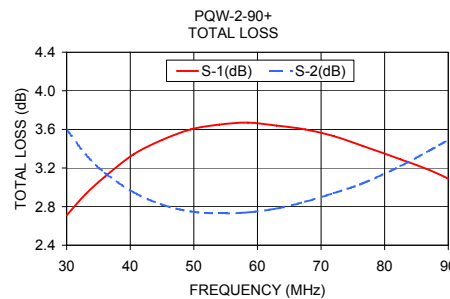
## Outline Dimensions (inch/mm)

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	

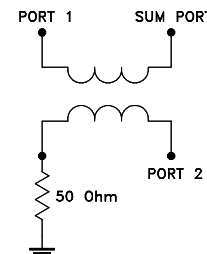
## Typical Performance Data

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						
30.00	2.71	3.60	0.89	32.92	89.77	1.02	1.03	1.01
33.00	2.93	3.34	0.41	32.65	89.83	1.02	1.03	1.02
36.00	3.11	3.15	0.04	32.46	89.85	1.02	1.04	1.02
40.50	3.34	2.95	0.39	32.18	89.90	1.02	1.04	1.01
45.00	3.49	2.82	0.67	31.83	89.99	1.03	1.05	1.01
49.50	3.60	2.75	0.84	31.41	90.02	1.03	1.05	1.01
54.00	3.65	2.73	0.92	30.85	90.14	1.03	1.05	1.00
58.50	3.67	2.74	0.93	30.15	90.22	1.04	1.06	1.01
63.00	3.64	2.78	0.86	29.25	90.32	1.05	1.06	1.02
67.50	3.60	2.85	0.75	28.24	90.43	1.06	1.07	1.03
72.00	3.53	2.94	0.59	27.13	90.56	1.08	1.07	1.05
76.50	3.43	3.04	0.39	25.96	90.75	1.10	1.09	1.06
82.50	3.29	3.22	0.07	24.40	91.08	1.13	1.11	1.09
87.00	3.18	3.38	0.20	23.25	91.34	1.15	1.13	1.12
90.00	3.09	3.49	0.41	22.50	91.57	1.17	1.15	1.13

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-Circuit's applicable established test performance criteria and measurement instructions.
- 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](http://www.minicircuits.com/MCLStore/terms.jsp)

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