

Plug-In

Power Splitter/Combiner

PQW-2-90+

2 Way-90° 50Ω 30 to 90 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 (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

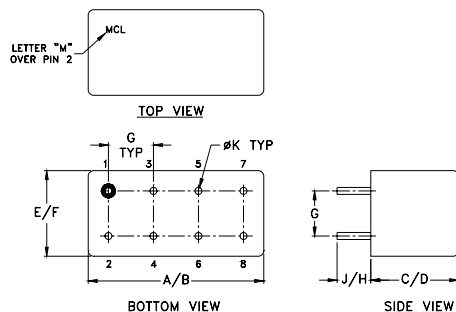
FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) Avg. of Coupled Outputs less 3 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
	Typ.	Min.	Typ.	Max.	Max.	Max.
f _L -f _U						
30-90	27	20	0.3	0.6	3	1.0

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						
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

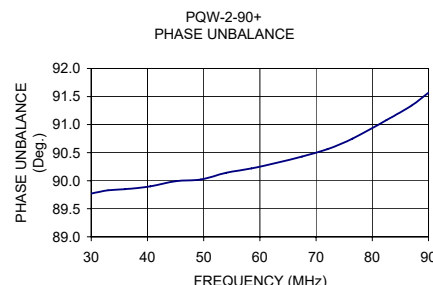
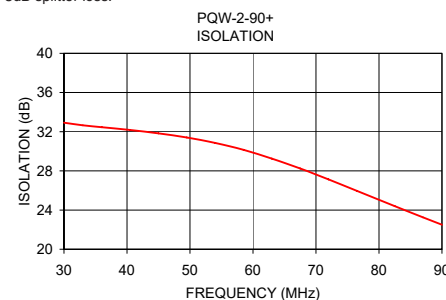
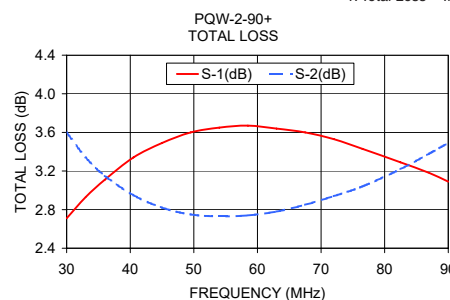
1. Total Loss = Insertion Loss + 3dB splitter loss.

Outline Drawing

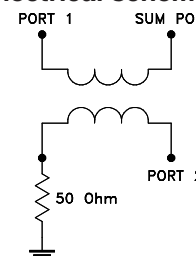


Outline Dimensions (inch/mm)

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

- 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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