

Coaxial Frequency Mixer

Level 7 (LO Power +7 dBm) 1 to 1000 MHz

ZLW-2



CASE STYLE: M21

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

Permanent damage may occur if any of these limits are exceeded.

Coaxial Connections

LO	1
RF	3
IF	2

Features

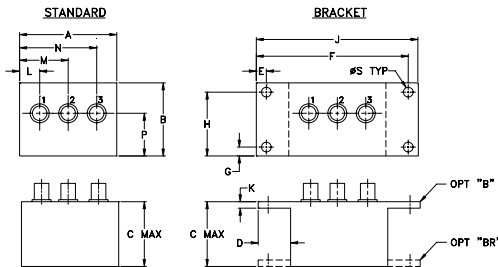
- low conversion loss, 5.68 dB typ.
- high L-R isolation, 40 dB typ., L-I, 40 dB typ.
- wideband, 1 to 1000 MHz
- rugged shielded case

Applications

- VHF/UHF
- cellular
- instrumentations

Connectors	Model	Price	Qty.
SMA	ZLW-2	\$56.95 ea.	(1-9)
BRACKET (OPTION "B")		\$5.00	(1+)
BRACKET (OPTION "BR")		\$1.50	(1+)

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
1.50	1.13	1.00	.50	.155	2.345	.138	.987
38.10	28.70	25.40	12.70	3.94	59.56	3.51	25.07

J	K	L	M	N	P	S	wt
2.50	.10	.31	.75	1.19	.66	.150	grams
63.50	2.54	7.87	19.05	30.23	16.76	3.81	40.0

Electrical Specifications

FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)								
		L	M	U	L	M	U						
1-1000	DC-1000	55	45	40	25	35	20	50	40	40	25	30	20

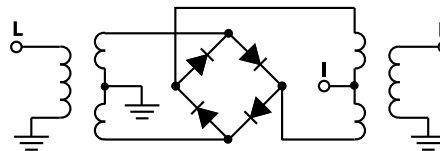
1 dB COMP: +1 dBm typ.

L = low range [f_L to $10 f_L$] M = mid range [$10 f_L$ to $f_U/2$] U = upper range [$f_U/2$ to f_U]
 m = mid band [$2f_L$ to $f_U/2$]

Typical Performance Data

Frequency (MHz)	Conversion Loss (dB)		Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
	LO	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm
1.00	31.00	7.23	>67.00	>67.00	1.30	2.70
2.00	32.00	6.50	>67.00	>67.00	1.15	2.63
5.00	35.00	5.80	>67.00	>67.00	1.07	2.77
10.00	40.00	5.62	>67.00	>67.00	1.06	2.55
20.00	50.00	5.68	>67.00	>67.00	1.07	2.41
50.00	80.00	5.58	61.94	63.74	1.09	2.37
100.00	70.00	5.53	54.33	54.76	1.11	2.29
167.34	137.34	5.57	48.65	47.61	1.16	2.20
233.87	203.87	5.72	45.10	43.03	1.18	2.16
300.40	270.40	5.45	42.56	40.00	1.20	2.13
366.94	336.94	5.73	40.45	37.57	1.22	2.06
466.74	436.74	5.82	38.33	34.32	1.23	2.13
500.00	470.00	5.72	38.80	34.10	1.26	2.09
599.81	569.81	6.02	37.43	32.81	1.29	2.09
666.34	636.34	6.11	37.94	31.57	1.34	2.04
799.41	769.41	6.27	36.06	29.67	1.40	2.13
832.68	802.68	6.46	35.22	28.79	1.47	2.19
899.21	869.21	7.00	33.77	26.14	1.55	2.24
932.48	902.48	7.37	33.17	25.03	1.66	2.28
1000.00	969.00	7.63	32.49	23.59	1.72	2.30

Electrical Schematic



Mini-Circuits
 ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine www.minicircuits.com Provides ACTUAL Data Instantly at [minicircuits.com](http://www.minicircuits.com)

IF/RF MICROWAVE COMPONENTS

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuit's 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-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp.

REV. OR
 M93710
 ZLW-2
 DJ/TD/CP/AM
 070928
 Page 1 of 2

