

Coaxial Frequency Mixer

Level 17 (LO Power +17 dBm) 0.5 to 500 MHz

ZLW-1H



HT-Series
Tight Spot
SMA Wrench
From \$24.95

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
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, 6.13 dB typ.
- high L-R isolation, 45 dB typ., L-I, 40 dB typ.
- rugged shielded case

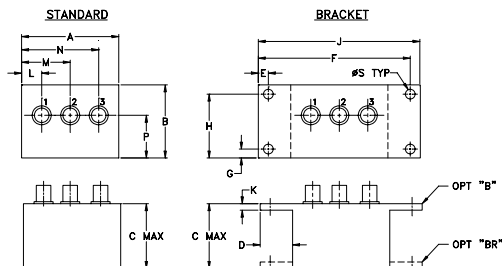
Applications

- VHF/UHF
- defense & federal communications
- instrumentations

CASE STYLE: M21

Connectors	Model	Price	Qty.
SMA	ZLW-1H	\$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)					
LO/RF	IF	Mid-Band		Total		L		M		U		L		M		U	
		$\bar{X}$	σ	Max.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
0.5-500	DC-500	6.13	0.08	7.5	8.5	55	45	45	30	35	25	45	35	40	30	30	20

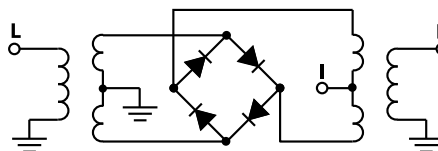
1 dB COMP.: +10 dBm typ.

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)
RF	LO	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm	LO +17dBm
0.50	30.50	7.38	64.73	58.33	1.26	2.93
2.00	32.00	6.29	62.80	57.04	1.13	2.80
10.00	40.00	5.89	58.80	53.94	1.08	2.61
20.00	50.00	5.93	51.76	47.62	1.09	2.57
50.00	80.00	5.91	48.13	44.45	1.10	2.57
81.07	51.07	5.84	43.91	40.75	1.12	2.72
100.00	70.00	5.82	42.51	39.43	1.12	2.57
129.40	99.40	5.85	41.76	38.65	1.14	2.45
161.63	131.63	5.90	39.94	37.09	1.16	2.59
193.86	163.86	5.98	38.70	35.65	1.17	2.39
226.08	196.08	6.10	38.27	35.36	1.18	2.34
258.31	228.31	6.01	37.16	34.23	1.24	2.56
274.42	244.42	5.97	36.62	33.23	1.26	2.43
306.65	276.65	6.07	35.81	32.42	1.26	2.47
338.87	308.87	6.16	34.78	30.96	1.33	2.54
371.10	341.10	6.34	33.92	29.51	1.34	2.45
403.33	373.33	6.42	33.83	28.51	1.36	2.59
435.55	405.55	6.60	34.53	28.16	1.39	2.55
467.78	437.78	6.76	35.55	28.51	1.40	2.52
500.00	470.00	6.85	34.97	28.71	1.42	2.52

Electrical Schematic



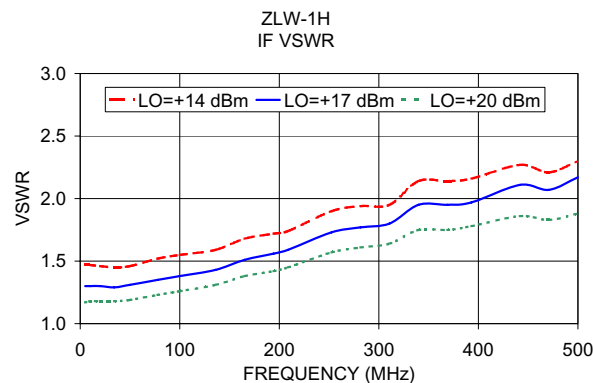
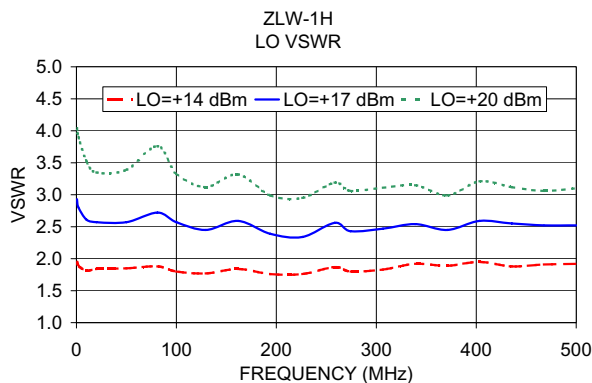
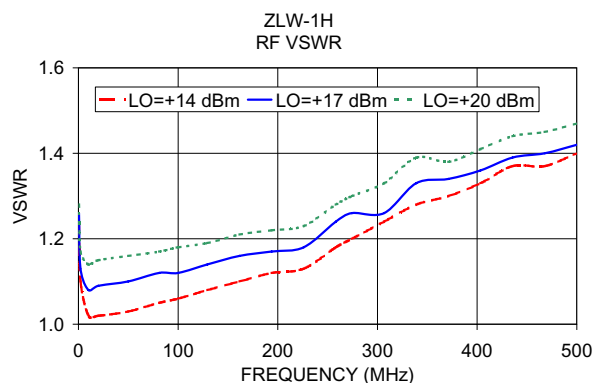
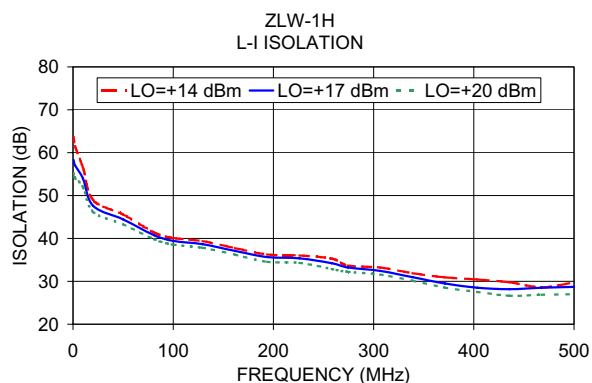
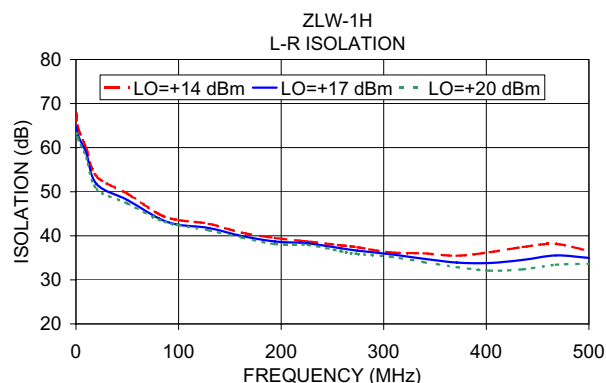
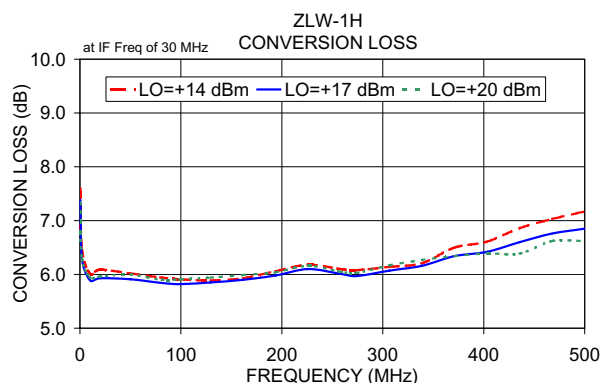
Notes

- 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-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



www.minicircuits.com P.O. Box 35166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

REV. OR
M93710
ZLW-1H
DJ/TD/CP/AM
130913



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

