

Coaxial Frequency Mixer

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

ZLW-1H



CASE STYLE: M21

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

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

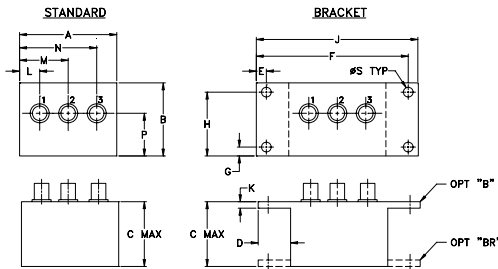
Electrical Specifications

FREQUENCY (MHz)	CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
	LO/RF	IF	Mid-Band m	Total Range Max.	L		M		U		L		M		U	
f_L - f_U		\bar{X}	σ	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	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 $f_U/2$]

Outline Drawing



Outline Dimensions (inch/mm)

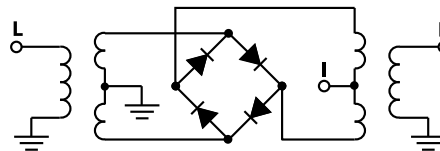
A	B	C	D	E	F	G	H
1.50	1.13	1.00	.50	.155	2.345	.138	.987
38.10	28.70	25.40	12.70	3.94	59.56	3.51	25.07

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

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



Mini-Circuits
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