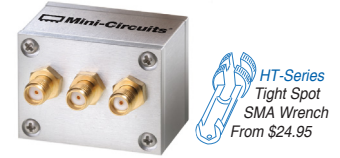


# Coaxial Frequency Mixer

## ZLW-1H

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



CASE STYLE: M21

Connectors	Model
SMA	ZLW-1H
<b>BRACKET (OPTION "B")</b>	
<b>BRACKET (OPTION "BR")</b>	

### 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

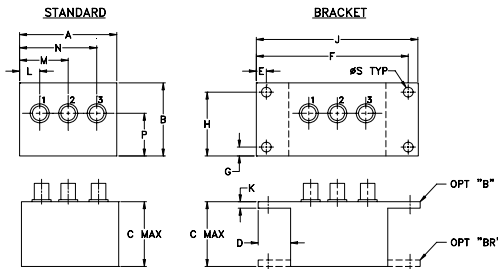
### Features

- 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

### 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 Range	Max.	L			M			U					
$f_L$ - $f_U$	$\bar{X}$	$\sigma$	Max.			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

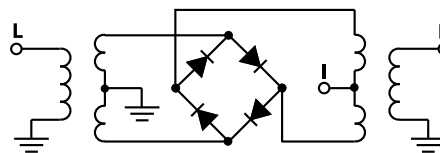
1 dB COMP.: +10 dBm typ.

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

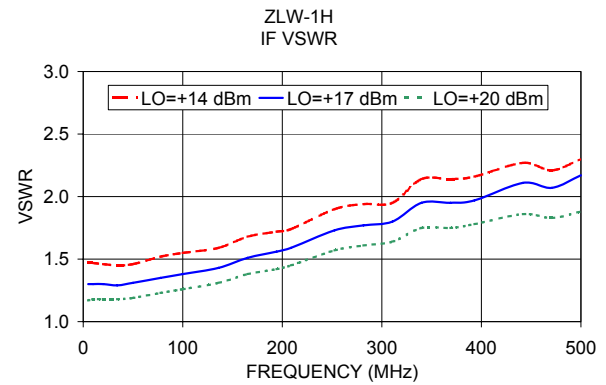
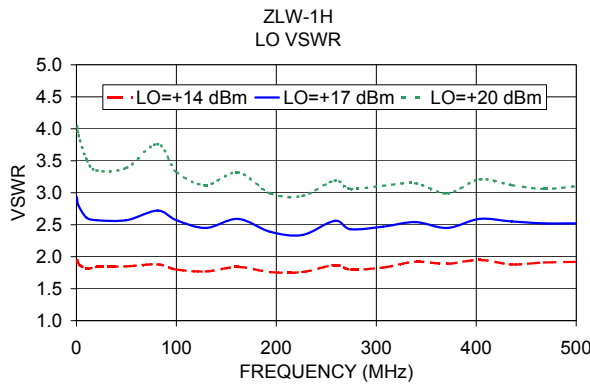
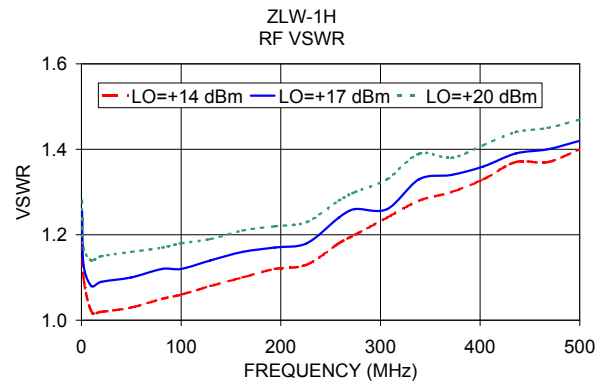
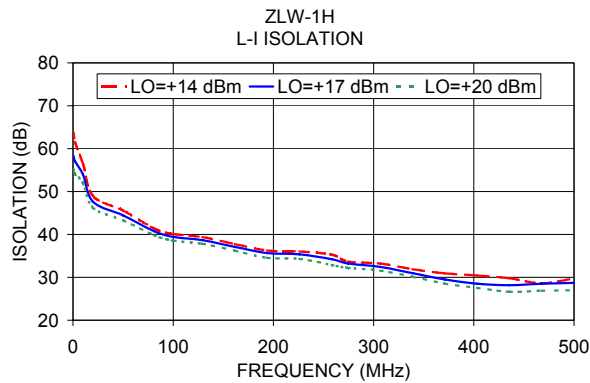
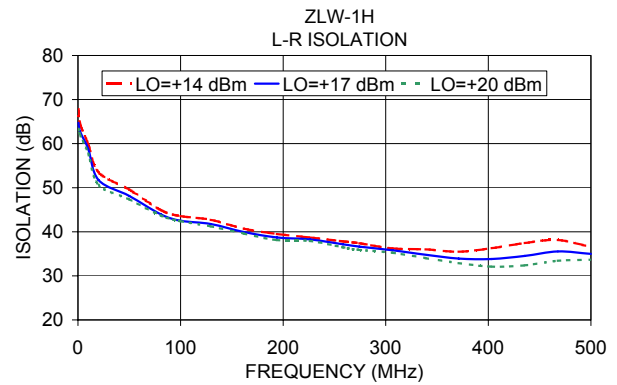
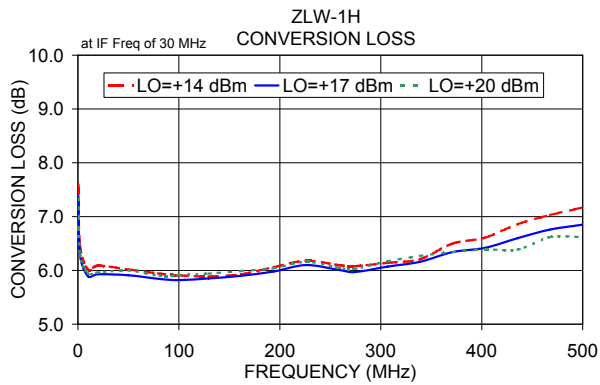
### Electrical Schematic



### Notes

- 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.
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