

# Coaxial Frequency Mixer

## ZLW-1-1+ ZLW-1-1

Level 7 (LO Power +7 dBm) 0.1 to 500 MHz



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, 4.82 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-1-1(+)	\$53.95 ea.	(1-9)
BRACKET (OPTION "B")		\$5.00	(1+)
BRACKET (OPTION "BR")		\$1.50	(1+)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

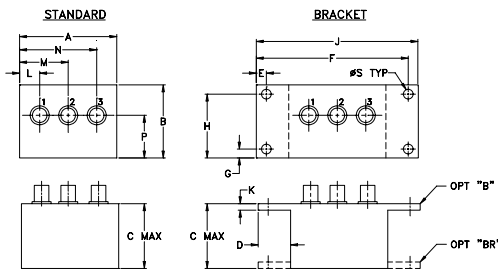
### Electrical Specifications

FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)									
		L	M	U	L	M	U							
LO/RF $f_L-f_U$	Mid-Band m $\bar{X}$ $\sigma$ Max.	Total Range Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.				
0.1-500	DC-500	4.82 0.07 7.5 8.5	50	45	45	30	35	25	45	30	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  $f_U/2$ ]

### 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

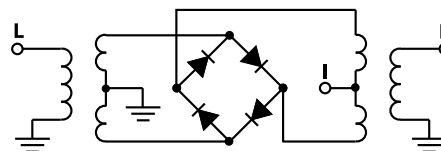
  

J	K	L	M	N	P	S	wt
2.50	.10	.31	.75	1.19	.66	.150	grams
63.50	2.54	7.87	19.05	30.23	16.76	3.81	40.0

### 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 +7dBm	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm
0.10	30.10	5.97	>67.00	>67.00	1.27	2.30
0.50	30.50	5.10	>67.00	>67.00	1.27	2.24
1.00	31.00	5.03	>67.00	60.45	1.27	2.26
2.00	32.00	4.95	>67.00	60.33	1.25	2.20
5.00	35.00	4.94	>67.00	60.77	1.23	2.16
10.00	40.00	4.92	>67.00	61.39	1.18	2.11
20.00	50.00	5.01	>67.00	61.65	1.15	2.08
50.00	80.00	4.95	>67.00	61.63	1.12	2.09
69.83	99.83	4.92	57.89	55.93	1.09	2.12
100.00	70.00	4.82	51.38	49.30	1.10	2.18
173.07	143.07	4.99	42.54	40.81	1.11	2.22
200.00	170.00	5.08	43.50	41.01	1.15	2.23
224.69	194.69	5.23	41.57	39.41	1.22	2.38
259.11	229.11	5.21	38.74	36.85	1.27	2.43
293.52	263.52	5.32	37.88	36.40	1.31	2.44
345.14	315.14	5.71	36.54	33.55	1.34	2.56
396.76	366.76	5.68	37.59	34.68	1.36	2.75
431.18	401.18	5.98	37.76	36.68	1.35	2.85
465.59	435.59	7.01	37.18	36.08	1.31	2.95
500.00	470.00	7.80	38.33	34.17	1.23	3.00

### Electrical Schematic



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ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

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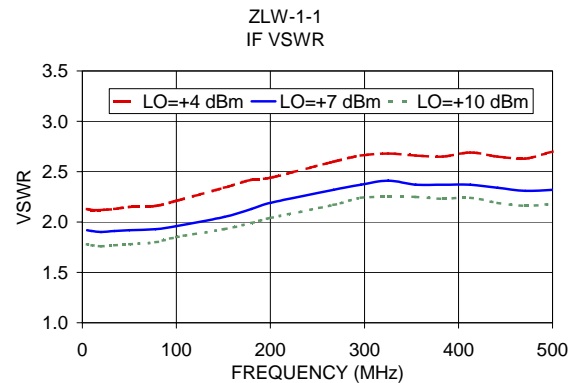
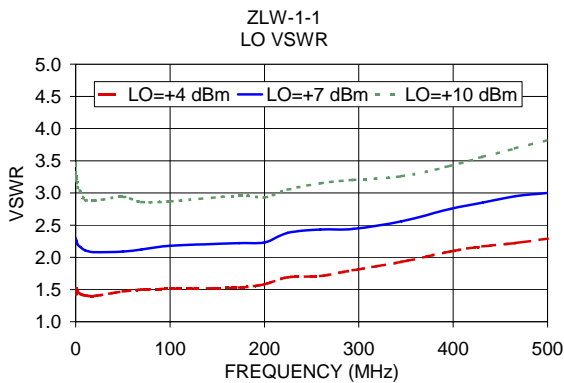
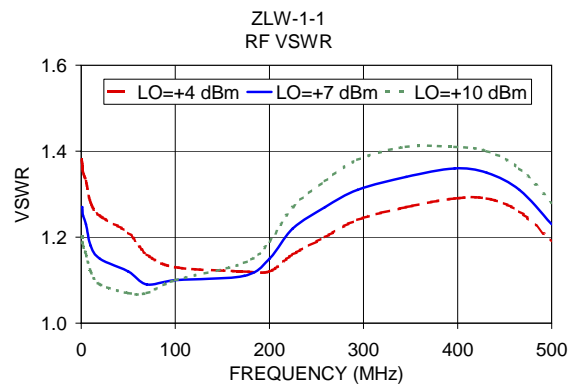
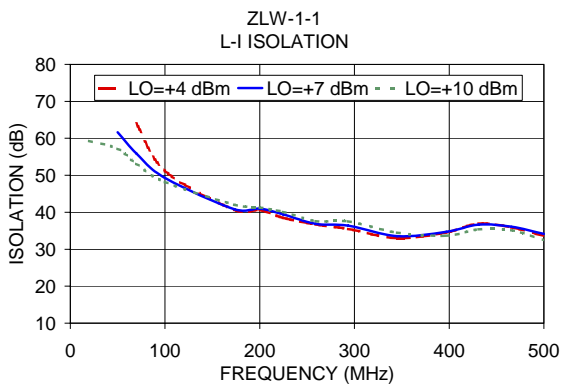
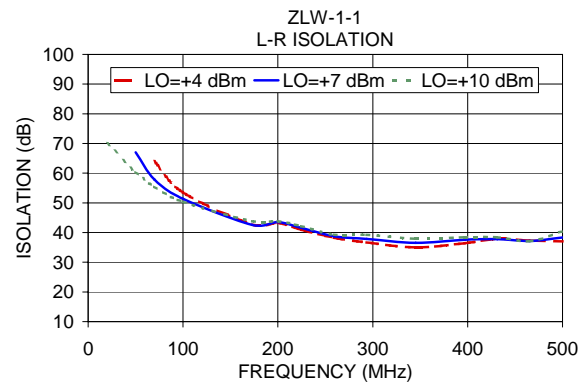
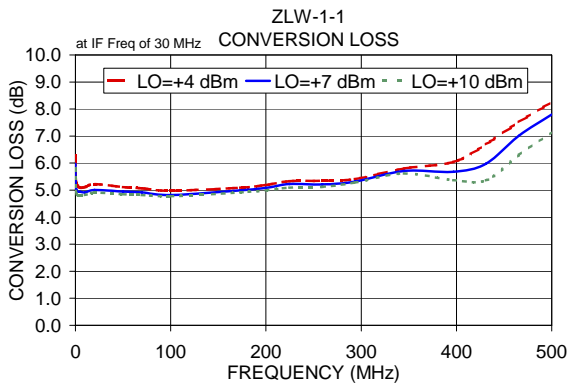
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# Performance Charts

# ZLW-1-1+ ZLW-1-1



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