

Coaxial Frequency Mixer

ZLW-1W+ ZLW-1W

Level 7 (LO Power +7 dBm) 1 to 750 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, 5.74 dB typ.
- high L-R isolation, 45 dB typ., L-I, 40 dB typ.
- wideband, 1 to 750 MHz
- rugged shielded case

Applications

- VHF/UHF
- instrumentations
- defense & federal communications

Connectors	Model	Price	Qty.
SMA	ZLW-1W(+)	\$56.95 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.

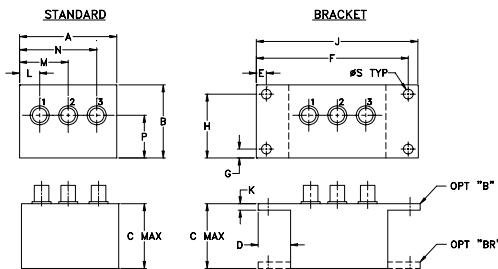
Electrical Specifications

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} σ Max. Total Range Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.						
1-750	DC-750	5.74	0.5	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)

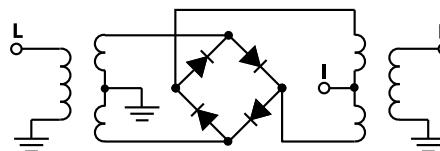
A	B	C	D	E	F	G	H
1.50	1.13	1.00	.50	.155	2.345	.138	.987
38.10	28.70	25.40	12.70	3.94	59.56	3.51	25.07

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
1.00	31.00	6.42	>67.00	>67.00	1.20	3.31
2.00	32.00	5.97	>67.00	>67.00	1.12	3.09
5.00	35.00	5.50	>67.00	>67.00	1.10	3.15
10.00	40.00	5.66	>67.00	>67.00	1.12	2.99
20.00	50.00	5.60	>67.00	>67.00	1.14	2.99
50.00	80.00	5.60	>67.00	62.28	1.16	2.84
100.00	70.00	5.47	>67.00	55.09	1.20	2.88
130.14	100.14	5.52	57.96	51.55	1.23	2.75
200.00	170.00	5.62	50.48	45.84	1.30	2.74
285.11	255.11	5.47	45.61	40.64	1.35	2.74
362.59	332.59	5.71	42.62	37.34	1.40	2.78
414.25	384.25	5.97	40.09	36.21	1.45	2.78
500.00	470.00	6.14	39.49	33.17	1.48	2.80
543.39	513.39	6.24	37.59	31.35	1.50	2.82
595.04	565.04	6.21	37.44	31.39	1.49	2.85
646.70	616.70	6.16	36.31	33.58	1.51	2.93
672.53	642.53	6.27	36.63	31.60	1.58	2.94
698.36	668.36	6.43	36.64	29.86	1.64	3.03
724.18	694.18	6.68	36.68	28.78	1.72	3.01
750.00	720.00	6.98	35.77	27.45	1.83	3.01

Electrical Schematic



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IF/RF MICROWAVE COMPONENTS

REV. A
M118225
ZLW-1W
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Page 1 of 2

Performance Charts

ZLW-1W+ ZLW-1W

