

Coaxial Frequency Mixer

Level 7 (LO Power +7 dBm) 0.025 to 200 MHz

ZLW-3+

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, 4.61 dB typ.
- high L-R isolation, 45 dB typ., L-I, 40 dB typ.
- rugged shielded case

Applications

- VHF
- FM radio
- instrumentation



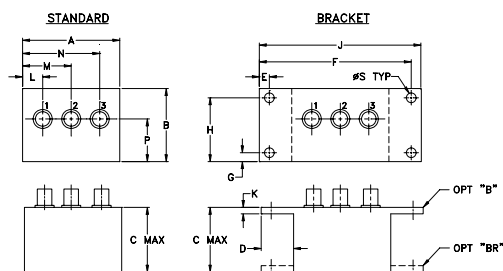
CASE STYLE: M21

Connectors	Model
SMA	ZLW-3+
BRACKET (OPTION "B")	
BRACKET (OPTION "BR")	

+RoHS Compliant

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

Outline Drawing



Outline Dimensions (inch)

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	
f_L - f_U		$\bar{X}$	σ	Max.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
0.025-200	DC-200	4.61	0.06	7.5	8.5	60	50	45	35	35	25	45	35	40	30	30	20

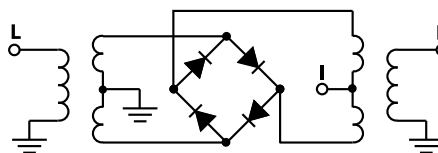
1 dB COMP.: +1 dBm typ.

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 $f_U/2$]

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
0.03	30.03	6.94	58.72	53.27	1.16	2.06
0.04	30.04	5.80	55.35	51.43	1.17	2.04
0.05	30.05	5.52	54.61	51.09	1.17	2.01
0.10	30.10	5.16	53.51	50.41	1.16	1.99
0.20	30.20	4.98	53.27	50.18	1.16	2.05
0.50	30.50	4.92	53.12	50.13	1.15	2.08
1.00	31.00	4.82	53.18	50.48	1.15	2.07
2.00	32.00	4.77	53.13	50.55	1.14	2.07
5.00	35.00	4.76	53.42	50.99	1.13	2.05
10.00	40.00	4.81	53.68	51.27	1.11	2.02
20.00	50.00	4.87	53.67	50.52	1.10	2.02
38.48	68.48	4.96	53.25	48.52	1.09	2.02
50.00	80.00	4.94	53.49	47.54	1.09	2.03
69.25	99.25	4.90	53.53	45.77	1.08	2.03
84.63	54.63	4.86	53.31	44.13	1.09	2.05
100.00	70.00	4.81	53.55	42.70	1.11	2.07
123.09	93.09	4.87	55.31	40.58	1.13	2.11
153.85	123.85	4.96	52.97	38.04	1.15	2.13
176.93	146.93	5.19	49.53	38.76	1.18	2.14
200.00	170.00	5.28	45.61	38.31	1.21	2.15

Electrical Schematic



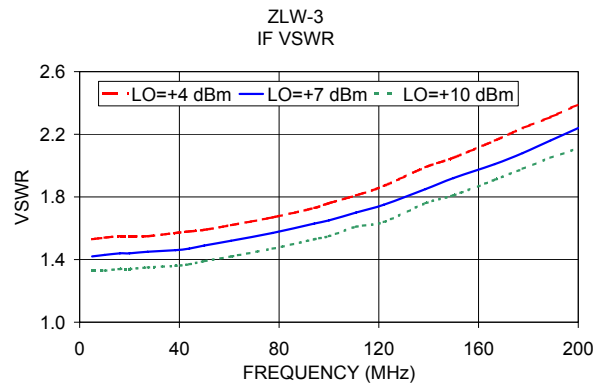
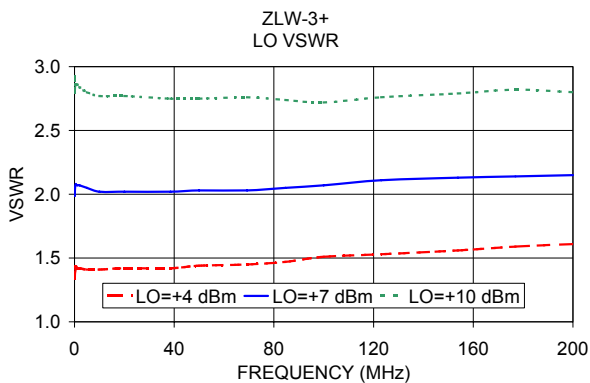
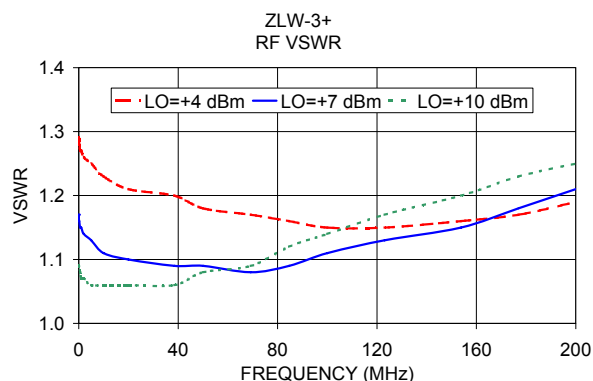
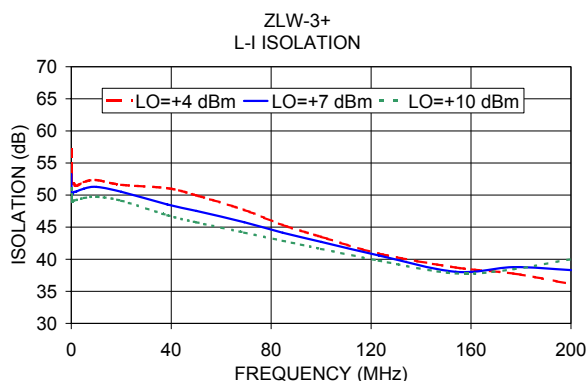
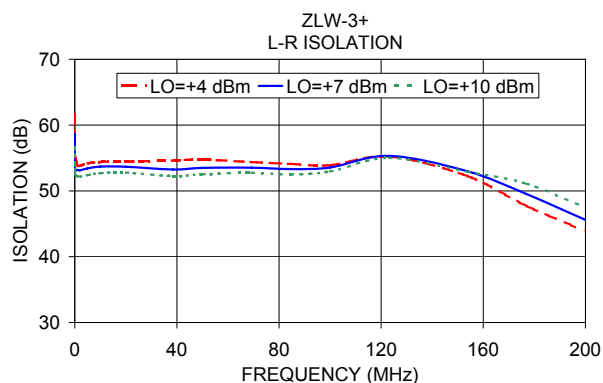
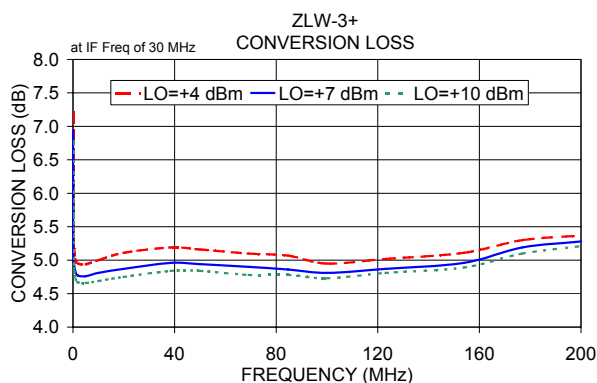
Notes

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