

Coaxial Frequency Mixer

Level 7 (LO Power +7 dBm) 0.003 to 100 MHz

Maximum Ratings

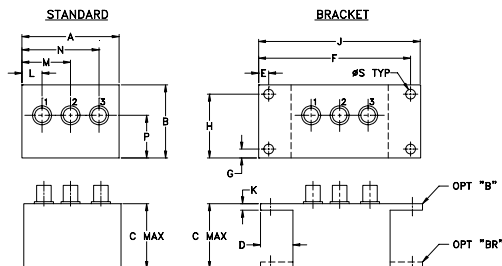
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA

Permanent damage may occur if any of these limits are exceeded.

Coaxial Connections

LO	1
RF	3
IF	2

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

Features

- low conversion loss, 4.58 dB typ.
- high L-R isolation, 45 dB typ., L-I, 40 dB typ.
- rugged shielded case

Applications

- VHF
- AM radio
- instrumentation

ZLW-6+



Generic photo used for illustration purposes only

CASE STYLE: M21
Connectors Model
SMA ZLW-6+
BRACKET (OPTION "B")
BRACKET (OPTION "BR")

+RoHS Compliant

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)					
LO/RF	IF	Mid-Band		Total Range	Max.	L		M		U		L		M		U	
		$\bar{X}$	σ			Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
0.003-100	DC-100	4.58	0.05	7.5	8.5	60	50	45	30	35	25	60	45	40	25	30	25

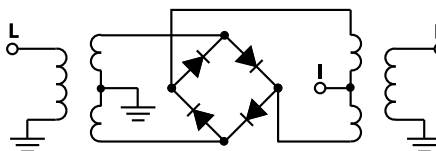
1 dB COMP.: +1 dBm typ.

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)	VSWR RF Port (:1)	Frequency (MHz)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR LO Port (:1)
RF	LO						
		LO +7dBm	LO +7dBm		LO +7dBm	LO +7dBm	LO +7dBm
0.25	30.25	4.69	1.18	0.25	87.94	69.25	2.72
0.50	30.50	4.70	1.21	2.20	88.51	67.15	2.60
1.00	31.00	4.72	1.23	5.13	80.05	62.74	2.56
2.00	32.00	4.71	1.23	10.00	74.49	58.28	2.48
4.00	34.00	4.72	1.25	30.00	65.04	46.76	2.43
6.00	36.00	4.75	1.26	35.00	61.86	45.54	2.42
8.00	38.00	4.77	1.25	40.00	58.66	43.62	2.43
10.00	40.00	4.77	1.24	45.00	62.82	41.15	2.44
15.00	45.00	4.75	1.24	49.00	62.74	40.69	2.45
19.00	49.00	4.72	1.23	53.00	59.34	40.12	2.47
23.00	53.00	4.69	1.20	57.00	55.11	40.91	2.50
31.00	61.00	5.04	1.19	61.00	51.93	41.11	2.55
39.00	69.00	5.21	1.17	65.00	50.11	39.64	2.58
51.00	81.00	5.29	1.22	69.00	48.56	38.35	2.62
61.00	91.00	5.51	1.37	73.00	47.39	36.57	2.65
67.00	97.00	5.71	1.44	81.00	45.06	33.06	2.70
70.00	100.00	5.80	1.46	85.00	44.27	31.87	2.74
85.00	115.00	5.84	1.41	92.50	43.42	30.32	2.89
92.50	122.50	5.90	1.24	96.25	43.22	30.02	2.98
100.00	130.00	5.93	1.12	100.00	42.87	30.05	3.06

Electrical Schematic



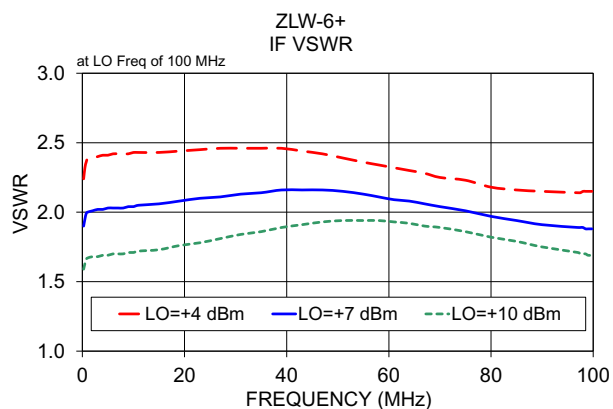
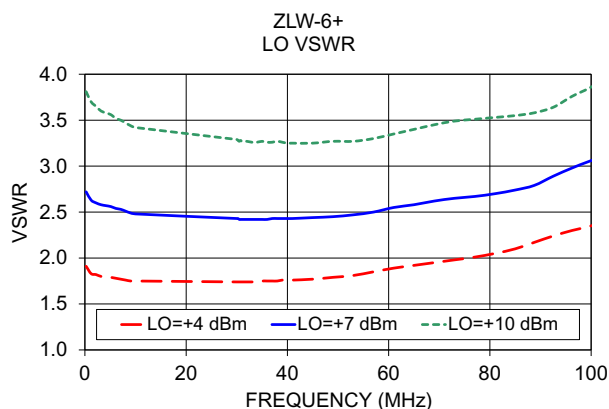
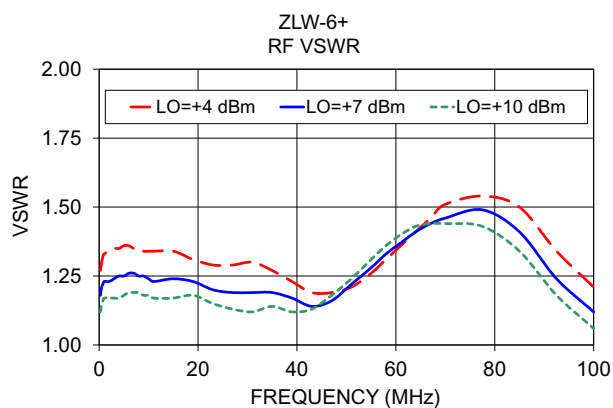
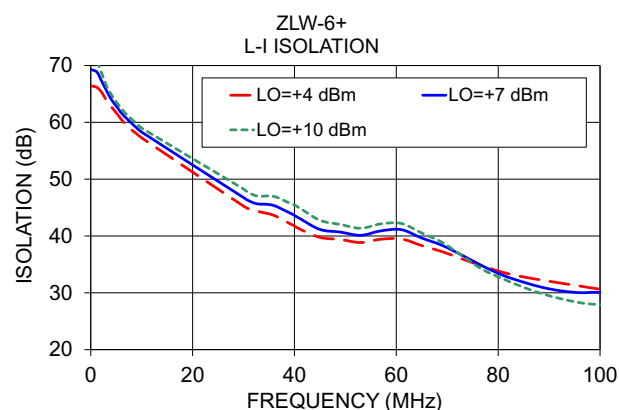
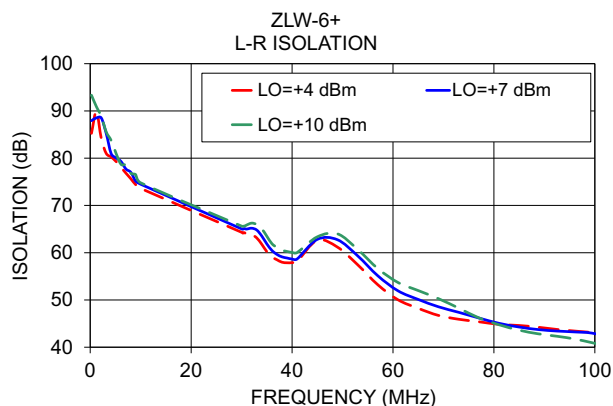
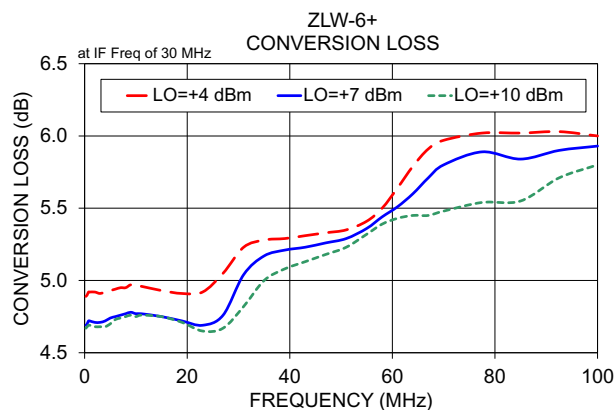
Notes

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