

Coaxial Frequency Mixer

NON-CATALOG

ZLW-1WSH+

Level 17 (LO Power +17 dBm) 5 to 750 MHz

Maximum Ratings

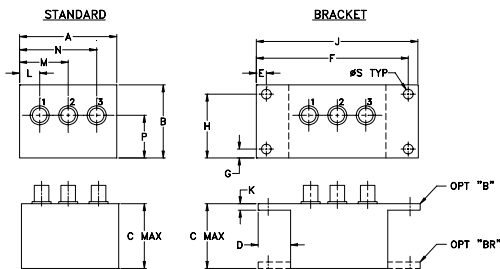
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
IF Current	40mA

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

Coaxial Connections

LO	1
RF	3
IF	2

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

Features

- low conversion loss, 5.83 dB typ.
- high isolation, 40 dB typ. L-R, 35 dB typ. L-I
- rugged shielded case

Applications

- VHF/UHF
- instrumentation
- defense & federal communications



CASE STYLE: M21

Connectors Model
SMA ZLW-1WSH+
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		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.
5-750	DC-750	5.83	0.07	7.5	9.0	50	45	40	30	30	20	45	40	35	25	30	20

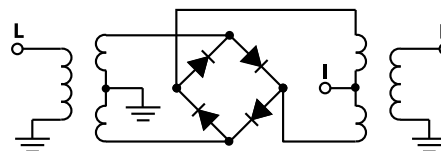
1 dB COMP.: +14 dBm typ.

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
5.00	35.00	5.75	63.53	62.84	1.14	1.53
10.00	40.00	5.93	59.56	57.61	1.06	1.52
20.00	50.00	5.97	51.08	48.85	1.03	1.41
50.00	80.00	5.91	46.53	44.54	1.04	1.54
100.00	70.00	5.77	42.94	41.21	1.05	1.48
125.84	95.84	5.75	40.60	39.07	1.05	1.48
175.77	145.77	5.75	37.40	36.16	1.06	1.43
225.70	195.70	5.81	35.63	34.27	1.08	1.45
250.67	220.67	5.69	35.33	33.54	1.10	1.40
300.60	270.60	5.68	34.13	32.33	1.14	1.51
350.54	320.54	6.07	33.75	30.78	1.19	1.44
400.47	370.47	6.22	33.94	29.35	1.24	1.56
450.41	420.41	6.24	33.76	28.19	1.28	1.60
500.00	470.00	6.26	35.44	29.36	1.32	1.59
525.31	495.31	6.57	33.37	28.37	1.35	1.68
550.27	520.27	6.80	31.48	26.00	1.37	1.74
600.21	570.21	6.81	29.25	22.84	1.39	1.68
650.14	620.14	6.95	29.21	20.68	1.38	1.89
700.08	670.08	7.41	32.78	22.79	1.35	1.94
750.00	720.00	7.73	31.78	24.62	1.29	1.96

Electrical Schematic



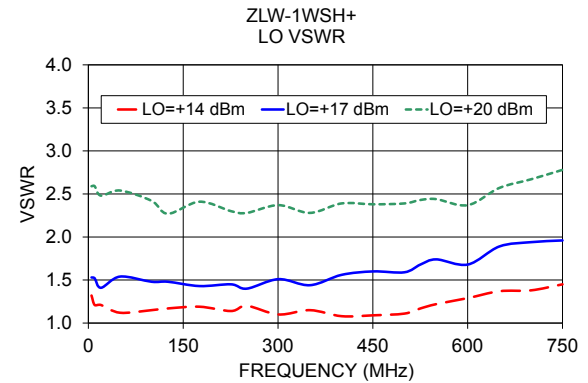
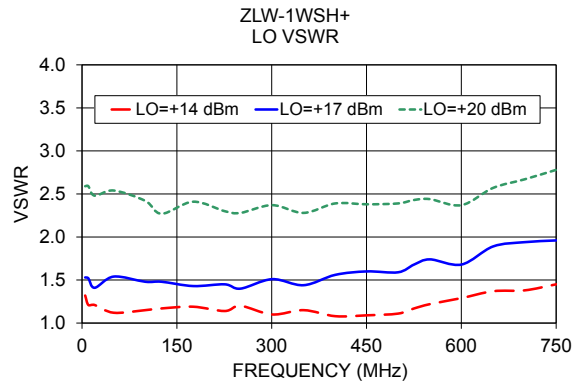
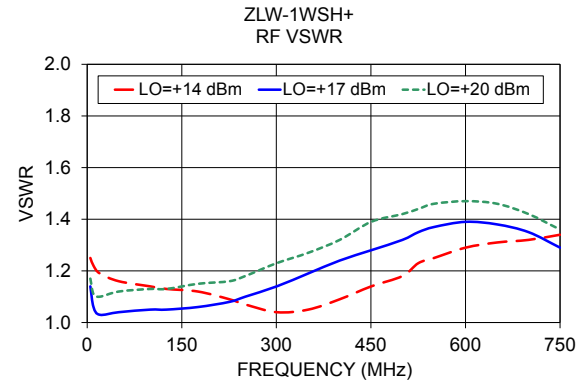
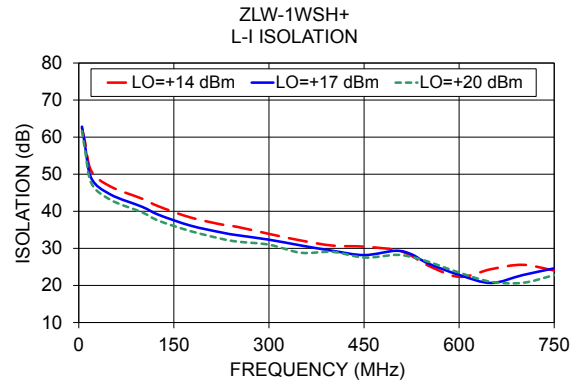
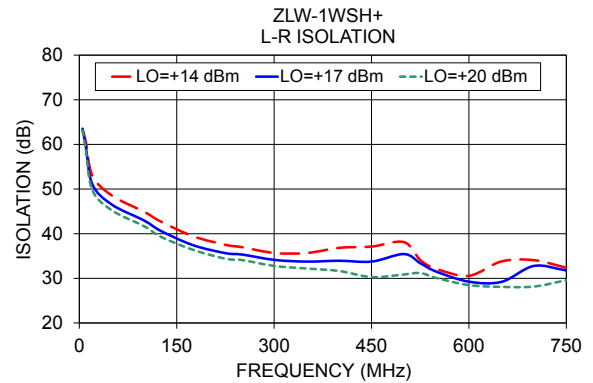
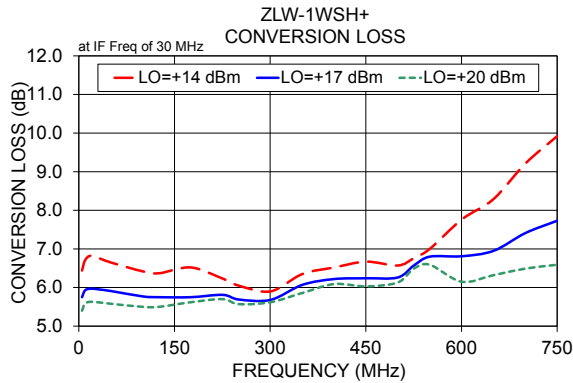
Notes

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www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

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