

Frequency Mixer

Level 13 (LO Power +13 dBm) 2 to 2500 MHz

ZLW-186MH



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

Features

- low conversion loss, 6.9 dB typ.
- wideband, 2 to 2500 MHz
- good L-R isolation, 35 dB typ., L-I, 49 dB typ.
- rugged shielded case

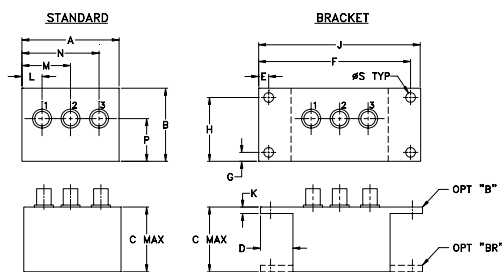
Applications

- VHF/UHF
- cellular
- GPS
- PCS
- ISM
- instrumentation

CASE STYLE: M21

Connectors	Model	Price	Qty.
SMA	ZLW-186MH	\$69.95 ea.	(1-9)
BRACKET (OPTION "B")		\$5.00	(1+)
BRACKET (OPTION "BR")		\$1.50	(1+)

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

Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF	IF	Mid-Band m				L		M		U		L		M		U	
$f_L - f_U$		$\bar{X}$	σ	Max.	Total Range Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
2-2500	2-1000	6.9	0.11	8.5	9.5	33	25	35	25	30	20	42	25	49	25	32	20

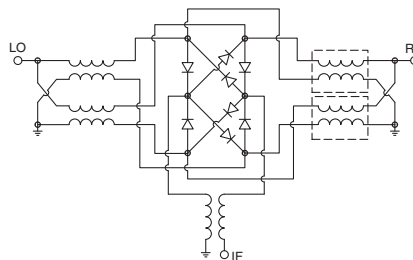
1 dB COMP.: +9 dBm typ.

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 +13dBm	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm
2.00	32.00	5.33	42.0	49.4	1.34	1.46
5.00	35.00	5.25	41.9	49.5	1.35	1.46
10.00	40.00	5.14	41.9	49.6	1.35	1.45
50.00	80.00	5.26	42.2	50.2	1.34	1.48
100.00	130.00	5.33	42.4	50.9	1.37	1.50
208.60	238.60	5.65	43.2	54.4	1.54	1.49
417.09	447.09	5.88	46.8	65.7	2.01	1.46
500.00	530.00	6.03	48.9	61.2	2.25	1.48
625.59	655.59	6.28	50.9	54.1	2.55	1.51
834.08	864.08	6.33	48.9	48.5	2.76	1.73
1000.00	1030.00	6.45	44.2	42.7	2.96	1.81
1042.58	1072.58	6.33	43.1	42.1	2.80	1.77
1251.07	1281.07	6.09	39.5	40.3	2.52	1.66
1459.57	1489.57	6.34	38.0	40.0	2.30	1.58
1500.00	1530.00	6.31	38.2	39.3	2.25	1.53
1668.06	1698.06	6.86	36.5	37.4	2.04	1.56
1876.56	1906.56	6.95	35.2	38.0	1.91	1.59
2000.00	2030.00	6.79	34.2	38.1	1.89	1.61
2085.05	2115.05	6.83	33.3	38.2	1.70	1.61
2293.55	2323.55	7.04	32.5	37.4	1.47	1.65
2470.00	2500.00	7.06	31.8	34.5	1.26	1.68
2500.00	2530.00	7.09	31.2	33.5	1.23	1.70

Electrical Schematic



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IF/RF MICROWAVE COMPONENTS

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