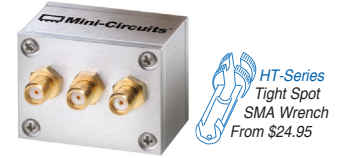


# Coaxial Frequency Mixer

## ZLW-186MH

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



CASE STYLE: M21

Connectors	Model
SMA	ZLW-186MH
<b>BRACKET (OPTION "B")</b>	
<b>BRACKET (OPTION "BR")</b>	

### 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

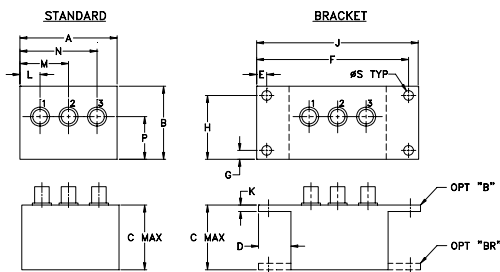
### Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF	IF	Mid-Band		Total Range Max.	Max.	L		M		U		L		M		U	
$f_L$ - $f_U$	$\bar{X}$	$\sigma$	Typ.			Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.
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  $f_U/2$ ]

### 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

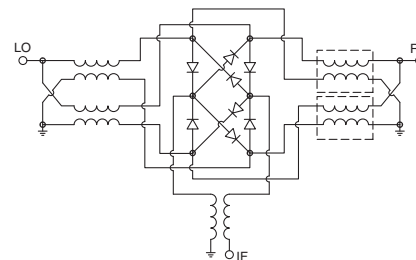
  

J	K	L	M	N	P	S	wt
2.50	.10	.31	.75	1.19	.66	.150	grams
63.50	2.54	7.87	19.05	30.23	16.76	3.81	40.0

### 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 +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



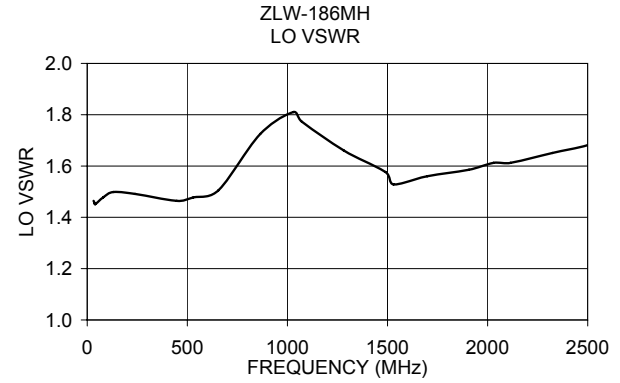
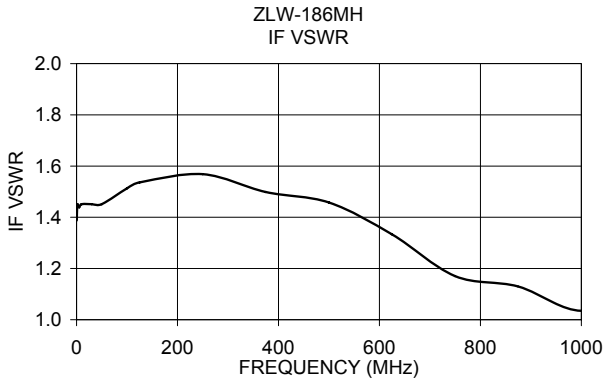
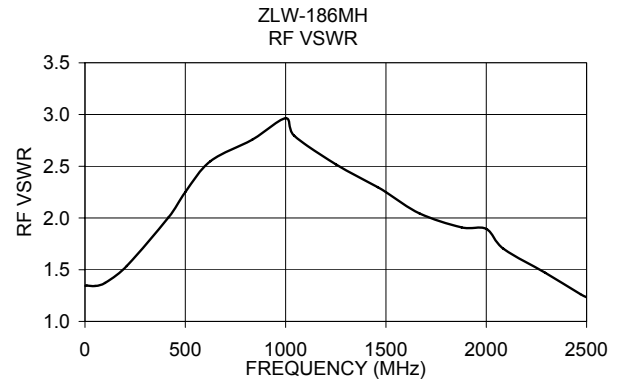
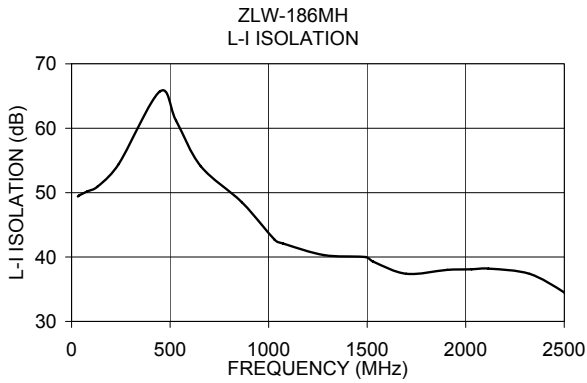
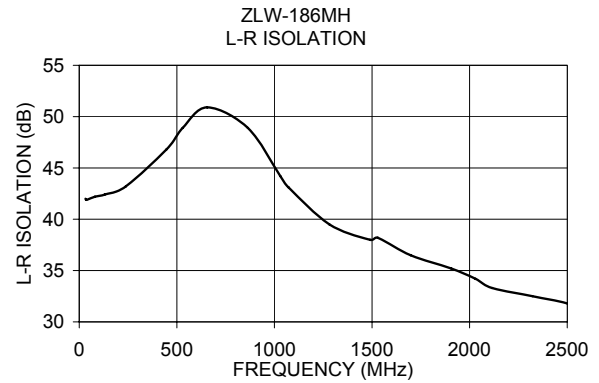
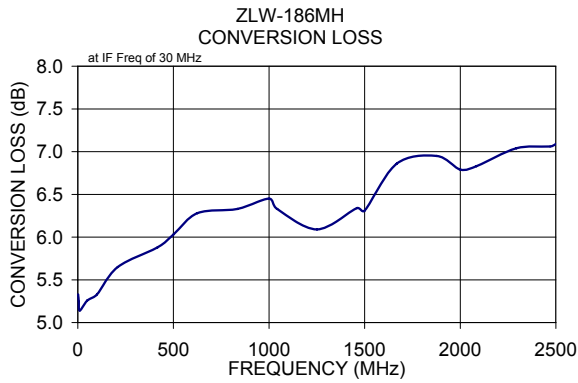
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