

Coaxial Frequency Mixer

ZLW-11H+ ZLW-11H

Level 17 (LO Power +17 dBm) 10 to 3000 MHz



CASE STYLE: M21

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, 6.83 dB typ.
- wideband, 10 to 3000 MHz
- rugged shielded case

Applications

- cellular
- GPS
- MMDS
- PCS
- instrumentation
- terrestrial radio

Connectors	Model	Price	Qty.
SMA	ZLW-11H(+)	\$99.95 ea.	(1-9)
BRACKET (OPTION "B")		\$5.00	(1+)
BRACKET (OPTION "BR")		\$1.50	(1+)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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)												
		L	M	U	L	M	U										
LO/RF f_L - f_U	Mid-Band m \bar{X} σ Max.	Total Range Max.			Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.					
10-3000	10-1000	6.83	0.09	10.0	12.0	27	20	25	18	23	16	27	20	25	18	23	16

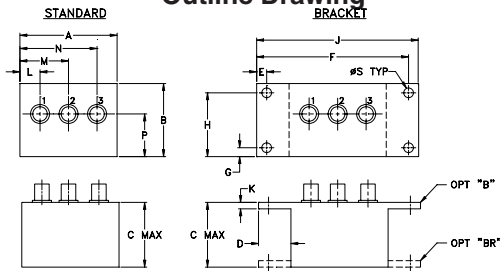
1 dB COMP.: +10 dBm typ.

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
10.00	40.00	6.43	32.26	35.01	1.13	2.07
20.00	50.00	6.58	33.52	36.23	1.07	2.19
103.44	73.44	6.60	32.25	33.97	1.08	2.01
200.00	170.00	6.78	30.89	32.03	1.13	1.96
290.31	260.31	6.75	29.76	30.61	1.18	1.91
500.00	470.00	6.94	28.74	29.28	1.29	1.83
570.63	540.69	6.81	28.80	29.04	1.34	1.81
757.50	727.50	7.00	28.06	28.08	1.48	1.81
944.38	913.91	7.05	28.00	26.87	1.66	1.80
1037.80	1007.40	7.37	28.67	26.49	1.72	1.74
1318.10	1288.00	6.81	27.69	26.66	1.92	1.69
1505.00	1474.90	6.68	27.57	27.97	1.99	1.65
1598.40	1568.30	6.65	27.30	28.78	1.75	1.91
1785.30	1755.00	6.71	27.75	28.96	1.89	1.91
1972.20	1942.10	6.57	29.51	31.44	1.76	1.75
2065.60	2035.10	6.76	28.94	33.79	1.68	1.66
2252.50	2222.10	6.61	30.22	36.80	1.68	1.49
2439.40	2408.60	6.63	31.19	37.00	1.69	1.14
2626.30	2596.00	6.95	30.21	30.13	1.49	1.26
3000.00	2969.30	8.58	32.46	26.88	1.90	2.47

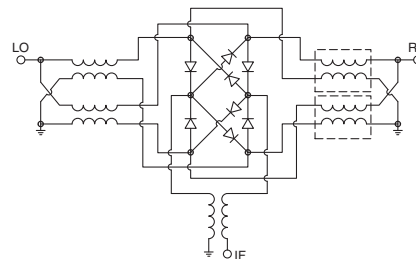
Outline Drawing



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 Schematic



Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

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Performance Charts

