Coaxial

Frequency Mixer

Level 7 (LO Power +7 dBm) 5 to 2000 MHz

ZLW-11



CASE STYLE: M21

Connectors	Model	Price	Qty.
SMA	ZLW-11	$71.95 ea.	(1-9)
BRACKET (OPTION "B")		$5.00	(1+)
BRACKET (OPTION "BR")		$2.50	(1+)

Maximum Ratings

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

Coaxial Connections

LO	1
RF	3
IF	2

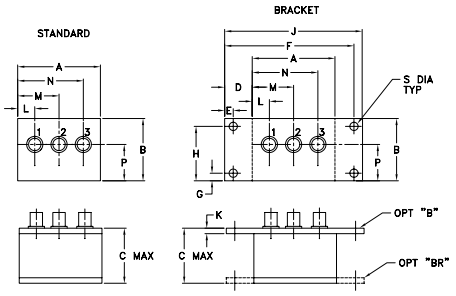
Features

- low conversion loss, 6.85 dB typ.
- good L-R isolation, 35 dB typ., L-I, 30 dB typ.
- wideband, 5 to 2000 MHz
- rugged shielded case

Applications

- VHF/UHF
- cellular
- GPS
- satellite distribution
- instrumentation

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			Total Range	L		M		U		L		M		U	
f_L-f_U		$\overline{X}$	σ	Max.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
5-2000	10-600	6.85	0.10	8.5	9.0	50	45	35	25	30	20	45	40	30	20	25	15

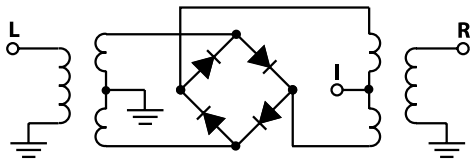
1 dB COMP.: +1 dBm typ.

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]

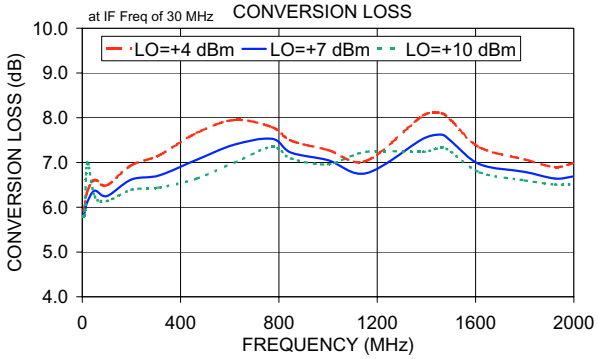
Typical Performance Data

Frequency (MHz)		Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR RF Port (:1)	VSWR LO Port (:1)
RF	LO	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm
5.00	35.00	5.85	46.19	>67.00	3.19	3.03
10.00	40.00	5.88	46.23	>67.00	2.54	2.69
20.00	50.00	6.11	46.26	>67.00	2.45	2.70
50.00	80.00	6.37	45.89	>67.00	2.62	2.61
100.00	70.00	6.25	44.70	64.66	2.96	2.46
200.00	170.00	6.62	41.17	55.90	3.21	2.31
311.92	281.92	6.71	38.72	50.11	3.31	2.27
465.39	435.39	7.06	37.94	46.15	3.42	2.13
618.85	588.85	7.40	38.38	45.38	3.19	2.08
772.31	742.31	7.53	38.07	45.67	2.96	1.93
849.04	819.04	7.22	37.13	43.78	2.41	1.73
1000.00	970.00	7.05	36.28	38.27	2.10	1.58
1156.00	1126.00	6.76	35.18	43.23	1.86	1.45
1386.20	1356.20	7.53	41.65	38.52	2.12	1.17
1462.90	1432.90	7.62	41.43	41.57	2.27	1.17
1500.00	1470.00	7.48	41.94	42.71	2.19	1.32
1616.40	1586.40	6.96	43.41	43.97	2.08	1.39
1800.20	1770.00	6.79	41.03	38.23	1.87	1.59
1923.30	1893.30	6.64	38.49	30.27	1.79	1.70
2000.00	1970.00	6.69	39.35	27.98	1.67	1.74

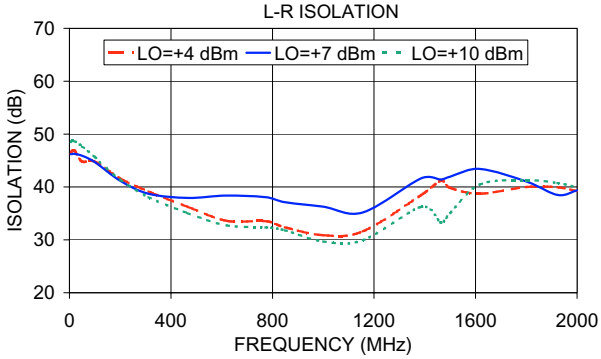
Electrical Schematic



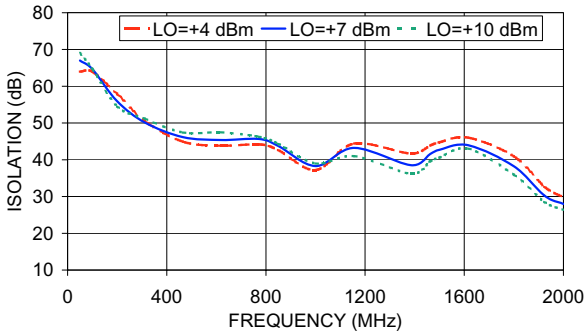
ZLW-11
at IF Freq of 30 MHz CONVERSION LOSS



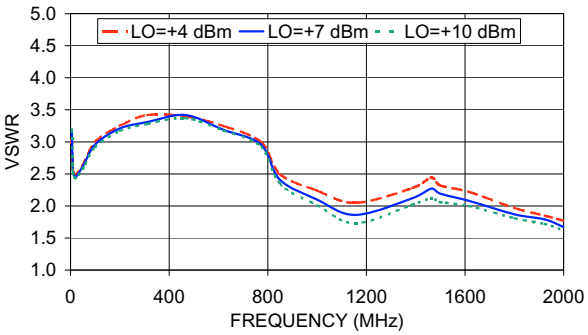
ZLW-11
L-R ISOLATION



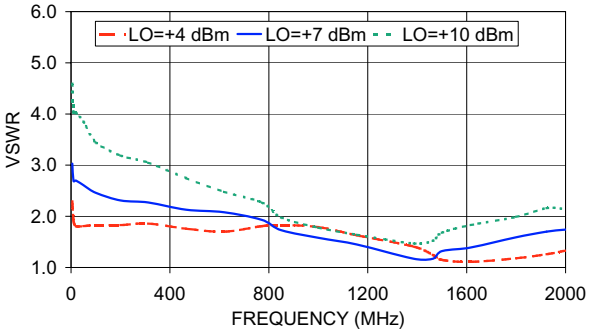
ZLW-11
L-I ISOLATION



ZLW-11
RF VSWR



ZLW-11
LO VSWR



ZLW-11
IF VSWR

