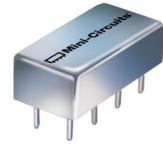


Plug-In Frequency Mixer

SBL-1ZMH+

Level 13 (LO Power +13 dBm) 2 to 1100 MHz



CASE STYLE: A06

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA
Permanent damage may occur if any of these limits are exceeded.	

Pin Connections

LO	1
RF	8
IF	3
GROUND	2,5,6,7
CASE GROUND	2,5,6,7
NOT USED	4

Features

- conversion loss, 6.63 dB typ.
- broadband 2 to 1100 MHz
- rugged welded construction

Applications

- VHF
- defense & federal communications

+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

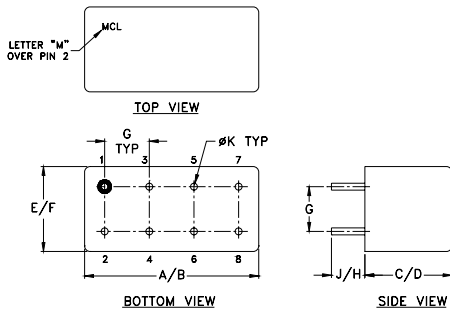
Electrical Specifications

FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)			
		L	M	U	L	M	U	
2-1100	DC-500	50	40	30	40	30	25	15

1 dB COMP.: +9 dBm typ.

L = low range [f_1 to $10 f_1$]
M = mid range [$10 f_1$ to $f_1/2$]
U = upper range [$f_1/2$ to f_1]

Outline Drawing



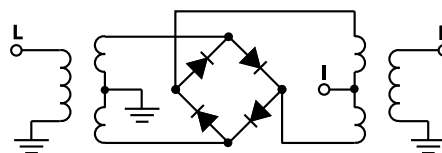
Outline Dimensions (inch/mm)

A	B	C	D	E	F
.770	.800	.285	.310	.370	.400
19.56	20.32	7.24	7.87	9.40	10.16
G	H	J	K	wt	
.200	.20	.14	.031	grams	
5.08	5.08	3.56	0.79	5.2	

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	7.47	70.78	65.58	1.79	2.25
4.00	34.00	6.83	70.28	59.74	1.74	2.13
5.00	35.00	6.65	70.18	57.88	1.74	2.10
10.00	40.00	6.27	70.01	52.36	1.81	1.95
20.00	50.00	6.18	69.85	46.22	1.76	1.97
50.00	80.00	6.15	69.63	39.08	1.77	1.93
100.00	70.00	6.15	67.71	33.80	1.75	1.86
119.64	89.64	6.08	67.73	32.85	1.59	1.84
200.00	170.00	6.34	74.27	29.38	1.53	1.91
276.50	246.50	6.71	67.53	27.35	1.50	1.97
433.36	403.36	6.85	51.02	25.68	1.68	2.06
500.00	470.00	6.21	49.19	26.25	1.83	2.12
550.00	520.00	5.99	53.13	26.35	1.90	2.16
590.21	560.21	5.95	51.95	27.35	1.95	2.29
747.07	717.07	6.91	45.36	31.35	1.82	2.36
903.93	873.93	7.63	45.31	33.05	1.52	2.24
1000.00	970.00	7.69	42.04	30.24	1.80	2.24
1021.57	991.57	7.87	40.76	30.36	2.02	2.28
1060.79	1030.79	8.11	35.87	30.40	2.24	2.25
1100.00	1070.00	8.49	32.15	34.03	2.55	2.16

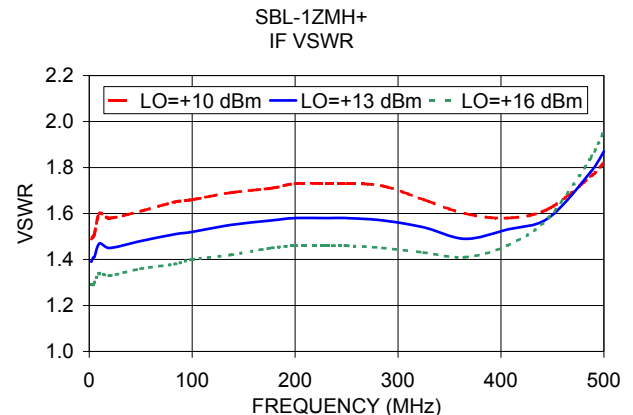
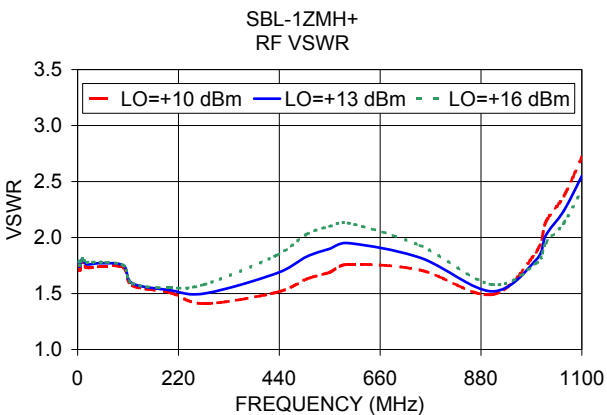
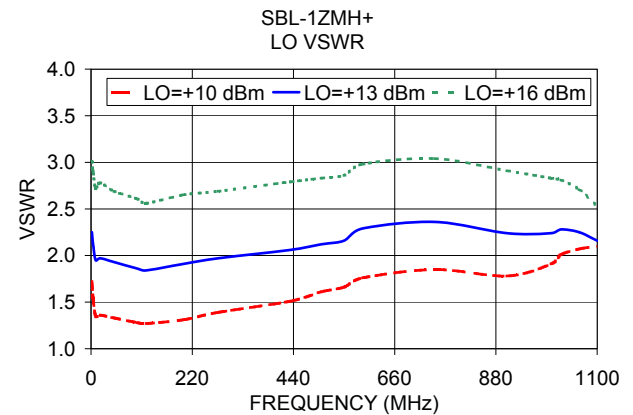
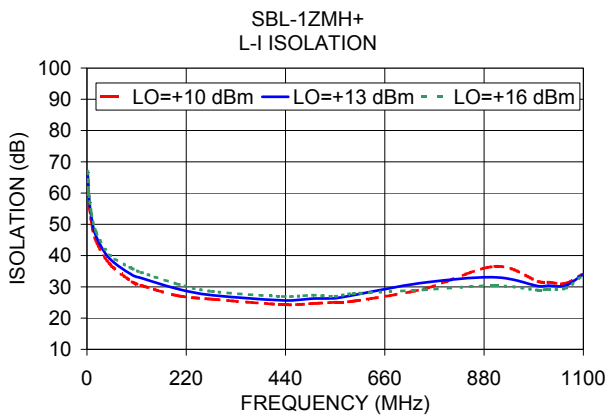
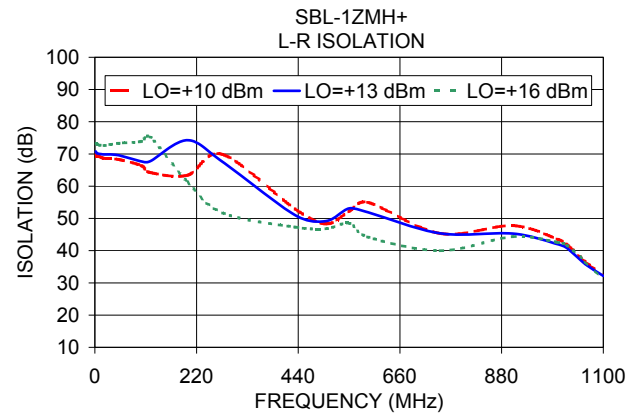
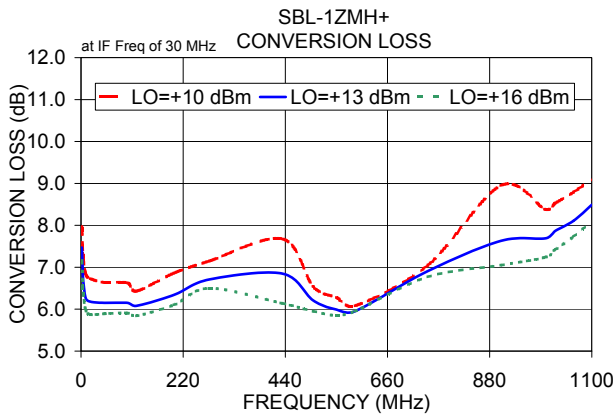
Electrical Schematic



Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuit's standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp





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