

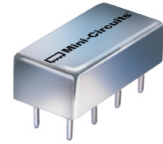
Plug-In

Frequency Mixer

NON-CATALOG

SBL-1XLH+

Level 10 (LO Power +10 dBm) 10 to 1000 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	8
RF	3,4^
IF	1
GROUND	2,5,6,7
CASE GROUND	2,5,6,7

^ pins must be connected together externally

Features

- excellent conversion loss, 6.0 dB typ.
- high L-R isolation, 40 dB typ. L-I isolation, 55 dB typ.
- rugged welded construction

Applications

- VHF/UHF
- defense & federal communications

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

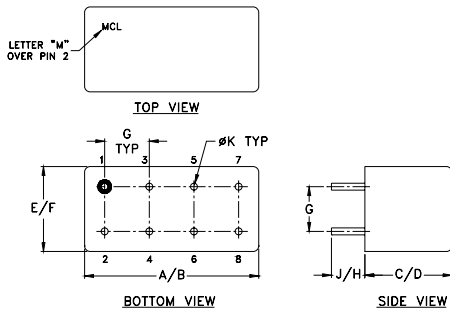
Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF f_L-f_U	IF	Mid-Band m		Total Range Max.	Total Range Max.	L		M		U		L		M		U	
		\bar{X}	σ			Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
10-1000	5-500	6.0	.12	7.5	8.5	50	40	40	25	30	20	70	45	55	40	45	30

1 dB COMP: +5 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]

Outline Drawing



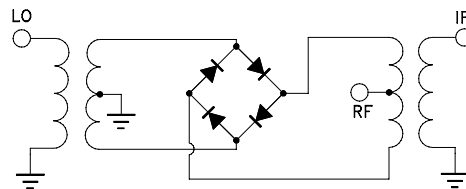
Outline Dimensions (inch/mm)

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 +10dBm	LO +10dBm	LO +10dBm	LO +10dBm	LO +10dBm
10.00	40.00	5.85	60.92	69.32	2.25	2.96
20.00	50.00	5.87	59.64	68.52	2.25	2.54
50.00	80.00	5.85	55.05	69.14	2.26	2.48
97.35	67.35	6.04	53.39	67.92	2.31	2.38
100.00	70.00	5.99	52.17	67.58	2.37	2.34
184.71	154.71	5.97	51.00	63.99	2.40	2.29
200.00	170.00	5.87	49.50	61.64	2.47	2.36
272.06	242.06	5.80	49.51	58.13	2.54	2.37
359.41	329.41	5.84	48.18	58.17	2.56	2.40
446.76	416.77	6.15	42.66	55.71	2.50	2.47
475.83	445.88	6.35	41.14	54.61	2.48	2.48
500.00	470.00	6.42	40.14	54.24	2.46	2.55
534.12	504.12	6.41	38.47	52.89	2.39	2.57
621.47	591.47	5.84	35.48	54.95	2.22	2.61
708.82	678.82	5.49	34.84	58.37	2.10	2.69
796.18	766.18	5.70	33.30	60.05	1.99	2.88
883.53	853.53	5.56	33.02	50.50	1.92	3.00
941.76	911.77	5.51	33.99	48.29	1.89	3.08
970.88	940.88	5.67	34.84	47.00	1.87	3.07
1000.00	970.00	5.70	35.36	45.65	1.87	3.06

Electrical Schematic



Notes

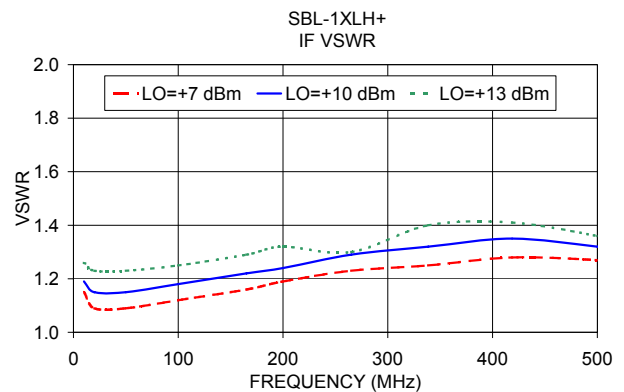
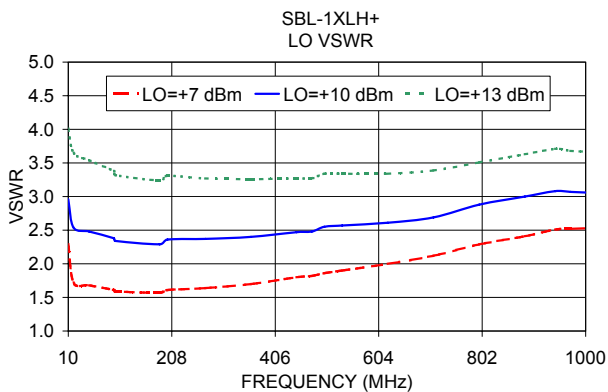
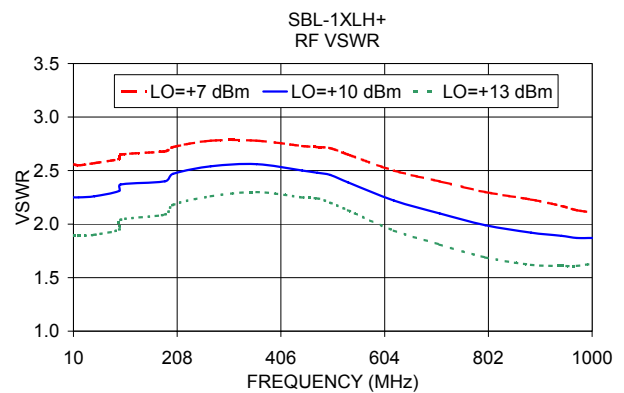
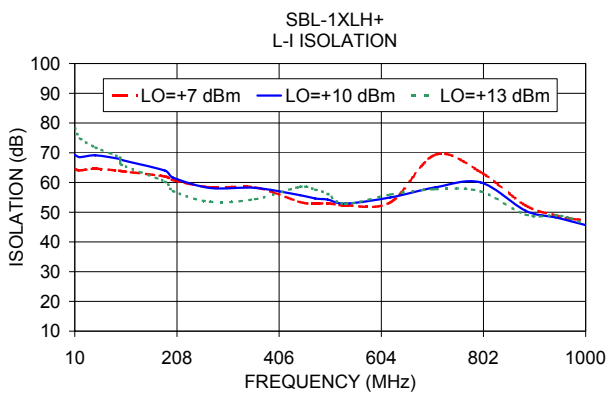
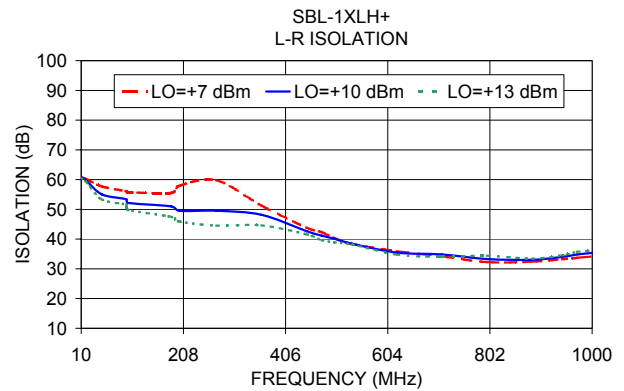
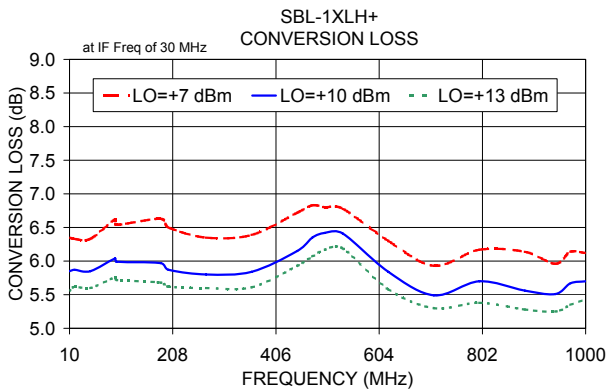
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NON-CATALOG

Performance Charts

SBL-1XLH+



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