

Plug-In

Frequency Mixer

SBL-1X+

Level 7 (LO Power +7 dBm) 10 to 1000 MHz

Maximum Ratings

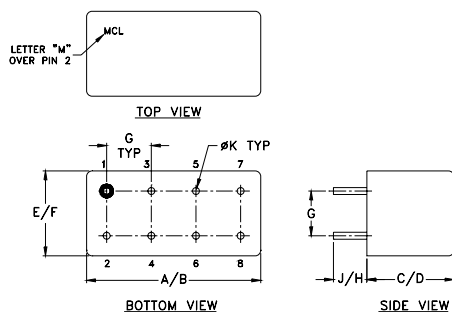
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	50mW
IF Current	40mA
Permanent damage may occur if any of these limits are exceeded.	

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

Outline Drawing



Outline Dimensions (inch/mm)

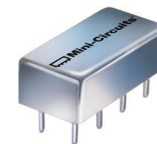
A	B	C	D	E	F
.770	.800	.285	.310	.370	.400
19.56	20.32	7.24	7.87	9.40	10.16
G	H	J	K	wt	
.200	.20	.14	.031	grams	
5.08	5.08	3.56	0.79	5.2	

Features

- excellent conversion loss, 5.88 dB typ.
- good L-R & L-I isolation, 40 dB typ.
- rugged welded construction

Applications

- VHF/UHF
- defense & satellite communications



CASE STYLE: A06
PRICE: \$11.45 ea. QTY (10)

+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	IF	Mid-Band		Total Range		L		M		U		L		M		U	
		$\bar{X}$	σ	Max.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.
10-1000	5-500	5.88	.10	7.5	8.0	50	40	40	30	30	20	50	45	40	35	35	25

1 dB COMP.: +1 dBm typ.

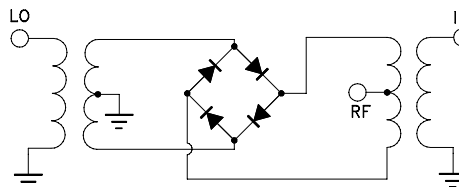
L = low range [f_L to 10 f_L]
m = mid band [$2f_L$ to $f_U/2$]

M = mid range [10 f_L to $f_U/2$] U = upper range [$f_U/2$ to f_U]

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
10.00	40.00	5.91	52.58	57.65	1.11	2.50
20.00	50.00	6.07	51.57	56.10	1.07	2.58
50.00	80.00	5.97	48.88	51.40	1.07	2.46
100.00	70.00	6.02	44.82	46.42	1.08	2.54
160.32	130.32	6.05	42.05	42.49	1.10	2.40
200.00	170.00	6.14	40.99	40.75	1.12	2.34
253.50	223.50	6.19	40.18	39.56	1.16	2.31
315.63	285.63	6.25	38.29	37.94	1.23	2.35
377.76	347.76	6.34	35.80	36.81	1.29	2.38
439.88	409.88	6.56	33.93	35.80	1.34	2.48
500.00	470.00	6.55	31.47	35.23	1.37	2.51
564.13	534.13	6.24	30.58	33.53	1.36	2.60
626.26	596.26	5.86	29.34	34.86	1.33	2.65
657.32	627.32	5.95	29.13	35.78	1.27	2.64
719.45	689.45	5.84	28.51	35.11	1.27	2.84
781.58	751.58	5.77	28.01	34.75	1.40	3.02
812.64	782.64	5.92	27.68	33.85	1.51	3.03
874.76	844.76	5.87	27.52	32.09	1.88	3.15
936.89	906.89	5.87	27.40	30.31	2.10	3.11
1000.00	970.00	6.04	27.28	30.12	2.89	3.07

Electrical Schematic



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IF/RF MICROWAVE COMPONENTS

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Page 1 of 2

