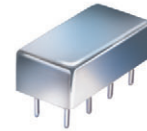


Plug-In Frequency Mixer

SBL-1X+

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



CASE STYLE: A06
PRICE: \$9.70 ea. QTY (1-9)

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

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

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

Applications

- VHF/UHF
- defense & satellite communications

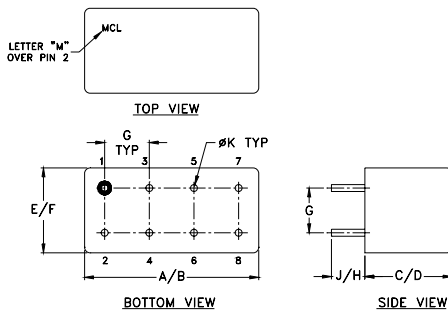
Electrical Specifications

FREQUENCY (MHz)	CONVERSION LOSS (dB)	LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)								
		L	M	U	L	M	U						
10-1000	5.88	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 range [$10 f_L$ to $f_U/2$] U = upper range [$f_U/2$ to f_U]
m = mid band [$2 f_L$ to $f_U/2$]

Outline Drawing



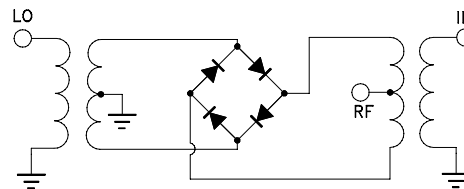
Outline Dimensions (inch/mm)

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

Electrical Schematic



Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

IF/RF MICROWAVE COMPONENTS

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuits' applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits 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-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp.

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