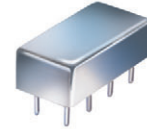


Plug-In Frequency Mixer

SBL-3+

Level 7 (LO Power +7 dBm) 0.025 to 200 MHz



CASE STYLE: A06
PRICE: \$10.70 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	1
IF	3,4 [^]
GROUND	2,5,6,7
CASE GROUND	2

[^] pins must be connected together externally

Features

- excellent conversion loss, 4.81 dB typ.
- high L-R isolation, 45 dB typ. L-I isolation, 40 dB typ.
- rugged welded construction

Applications

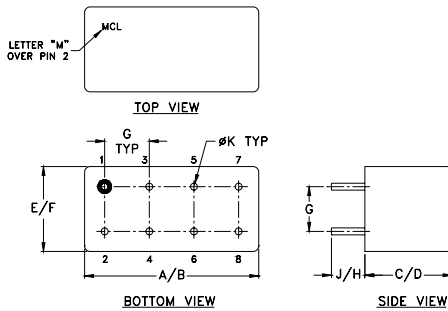
- VHF
- defense & federal communications

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.
.025-200	DC-200	4.81	.05	7.5	8.5	55	50	45	30	35	25	45	35	40	30	30	20

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



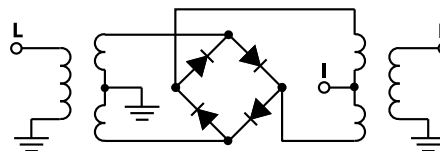
Outline Dimensions (inch/mm)

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)
RF	LO	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm	LO +7dBm
0.03	30.03	8.41	70.32	73.42	1.44	1.33
0.04	30.04	6.80	68.24	73.04	1.45	1.32
0.05	30.05	6.31	68.06	73.56	1.45	1.29
0.10	30.10	5.51	67.57	74.37	1.44	1.28
0.20	30.20	5.27	67.72	74.82	1.43	1.34
0.50	30.50	5.15	67.66	75.16	1.43	1.35
1.00	31.00	4.98	67.06	74.46	1.43	1.37
2.00	32.00	4.89	66.83	74.03	1.42	1.37
5.00	35.00	4.86	66.56	72.56	1.40	1.36
10.00	40.00	4.93	66.04	69.54	1.39	1.36
20.00	50.00	5.06	64.65	63.95	1.37	1.35
30.79	60.79	5.13	63.14	60.24	1.35	1.36
38.48	68.48	5.16	62.80	57.90	1.33	1.36
50.00	80.00	5.09	61.63	53.78	1.29	1.39
76.94	46.94	4.97	58.56	48.75	1.26	1.41
100.00	70.00	4.81	58.22	46.67	1.26	1.45
123.09	93.09	4.85	52.38	44.01	1.22	1.49
146.16	116.16	4.94	58.82	46.22	1.19	1.51
176.93	146.93	5.26	51.25	39.55	1.17	1.55
200.00	170.00	5.36	44.86	38.02	1.18	1.60

Electrical Schematic



Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

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IF/RF MICROWAVE COMPONENTS

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