

Plug-In Frequency Mixer

Level 7 (LO Power +7 dBm) 1 to 500 MHz

SBL-1+



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

^ pins must be connected together externally

Features

- excellent conversion loss, 5.6 dB typ.
- high L-R isolation, 45 dB typ. L-I isolation, 40 dB typ.
- rugged welded construction

Applications

- VHF
- defense & federal communications

CASE STYLE: A06
PRICE: \$9.70 ea. QTY (10)

+RoHS Compliant

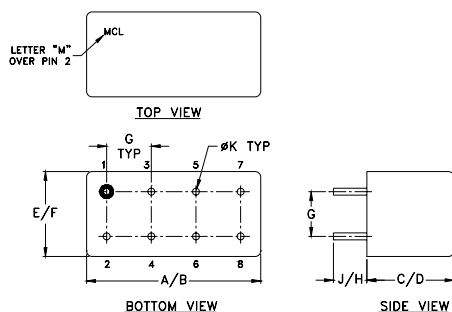
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications

FREQUENCY (MHz)		CONVERSION LOSS (dB)				LO-RF ISOLATION (dB)						LO-IF ISOLATION (dB)					
LO/RF f_L - f_U	IF	Mid-Band m		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.
1-500	DC-500	5.60	.09	7.0	8.0	60	45	45	35	40	25	45	35	40	25	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



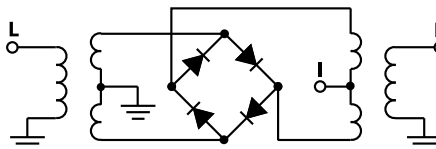
Outline Dimensions (inch)

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
1.00	31.00	6.67	67.00	65.61	1.80	3.75
2.00	32.00	6.24	67.00	67.00	1.14	2.81
5.00	35.00	5.74	64.84	67.00	1.14	2.89
10.00	40.00	5.58	64.19	64.81	1.14	2.83
20.00	50.00	5.67	62.22	61.69	1.15	2.69
32.19	62.19	5.60	59.04	57.74	1.16	2.72
50.00	80.00	5.60	56.71	54.39	1.17	2.62
78.97	48.97	5.56	52.21	49.67	1.18	2.62
100.00	70.00	5.52	49.41	46.90	1.20	2.66
156.94	126.94	5.53	44.20	41.66	1.22	2.62
200.00	170.00	5.68	41.56	38.98	1.26	2.58
203.72	173.72	5.67	41.05	38.52	1.26	2.56
250.50	220.50	5.63	40.04	37.29	1.28	2.59
297.29	267.29	5.61	36.90	33.97	1.30	2.64
344.07	314.07	5.81	37.11	33.88	1.31	2.59
375.26	345.26	6.13	36.02	32.79	1.30	2.60
406.44	376.44	6.15	34.80	31.05	1.28	2.72
437.63	407.63	6.08	33.79	30.39	1.27	2.77
468.82	438.82	6.00	32.80	30.12	1.24	2.82
500.00	470.00	6.31	32.36	30.37	1.21	3.01

Electrical Schematic



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IF/RF MICROWAVE COMPONENTS

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