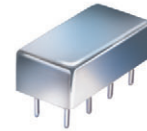


Plug-In Frequency Mixer

SBL-1MH+

Level 13 (LO Power +13 dBm) 1 to 500 MHz



CASE STYLE: A06
PRICE: \$13.70 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

^ pins must be connected together externally

Features

- excellent conversion loss, 5.73 dB typ.
- high L-R isolation, 45 dB typ.; L-I isolation, 40 dB typ.
- rugged welded construction

Applications

- VHF/UHF
- 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.
1-500	DC-500	5.73	.08	7.5	8.5	50	35	45	30	35	25	45	30	40	25	30	20

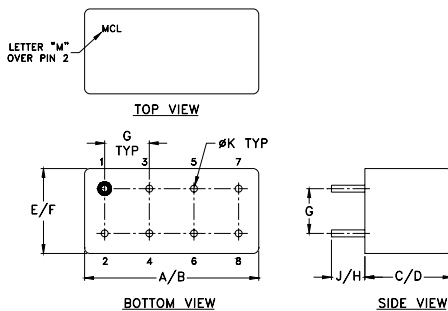
1 dB COMP.: +9 dBm typ.

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

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

U = upper range [$f_U/2$ to f_U]

Outline Drawing



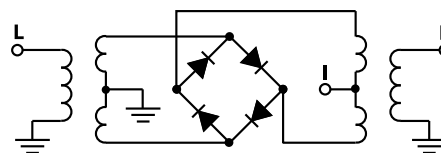
Outline Dimensions (inch/mm)

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 +13dBm	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm
1.00	31.00	7.26	66.63	59.30	1.29	1.95
2.00	32.00	6.48	65.04	58.69	1.07	1.98
20.00	50.00	5.69	63.01	55.53	1.08	1.89
47.78	77.78	5.60	58.78	50.86	1.08	1.82
63.38	93.38	5.57	56.72	48.94	1.08	1.80
141.35	111.35	5.41	48.96	44.44	1.09	1.79
172.53	142.53	5.46	47.22	43.17	1.09	1.83
203.72	173.72	5.61	45.85	42.14	1.09	1.78
219.32	189.32	5.58	44.34	41.70	1.10	1.85
234.91	204.91	5.62	44.18	40.98	1.10	1.83
266.10	236.10	5.48	44.90	40.38	1.11	1.88
281.69	251.69	5.53	43.24	40.07	1.12	1.91
328.47	298.47	5.70	41.21	38.04	1.15	1.96
359.66	329.66	5.95	41.01	37.04	1.18	2.04
390.85	360.85	5.89	39.17	36.14	1.23	2.06
422.04	392.04	6.29	38.02	34.90	1.32	2.08
453.23	423.23	6.32	37.70	34.14	1.37	2.11
468.82	438.82	6.23	37.66	34.16	1.41	2.19
484.41	454.41	6.27	37.86	34.53	1.45	2.34
500.00	470.00	6.32	38.19	35.22	1.49	2.45

Electrical Schematic



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ISO 9001 ISO 14001 AS 9100 CERTIFIED

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IF/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

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