

BLUE CELL™ Surface Mount Frequency Mixer

MBA-9MH

Level 13 (LO Power +13 dBm) 800 to 1000 MHz

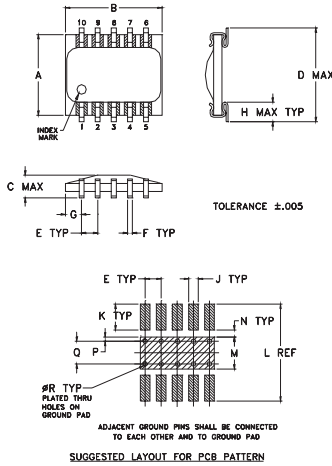
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	200mW
IF Current	40mA

Pin Configuration

LO	10
RF	5
IF	3
GROUND	1,4,7,8,9
ISOLATE	2,6

Outline Drawing



Outline Dimensions (inch/mm)

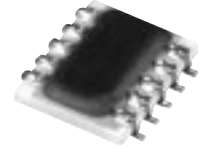
A	B	C	D	E	F	G	H	J
.250	.300	.070	.290	.050	.015	.050	.060	.030
6.35	7.62	1.78	7.37	1.27	.38	1.27	1.52	.76
K	L	M	N	P	Q	R	wt.	
.080	.300	.100	.020	.015	.070	.014	grams	
2.03	7.62	2.54	.51	.38	1.78	.36		.3

Features

- excellent temperature stability
- performance repeatability
- solder plated leads with strain relief
- very low cost
- ultra low height, 0.07"

Applications

- cellular
- WLAN
- ISM band
- PCMCIA



CASE STYLE: SM2
PRICE: \$7.95 ea. QTY.: (10-49)

Electrical Specifications

MODEL NO.	FREQUENCY (MHz)		CONVERSION LOSS (dB)		LO-RF ISOLATION (dB)			LO-IF ISOLATION (dB)			IP3@ center band Typ. (dBm)
	LO/RF f_L - f_U	IF	Mid-Band m \bar{x} σ	Total Range Max.	L	M	U	L	M	U	
MBA-9MH	800-1000	DC-200	6.7	0.1	—	9.0	25(typ.)	20(min.)	18(typ.)	12(min.)	15

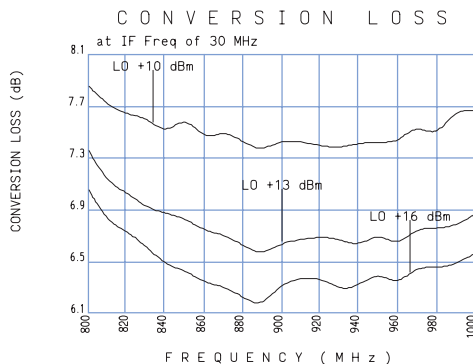
1 dB COMP.: +8 dBm typ.
L = low range [f_L to $f_U/2$] M = mid range [$f_U/2$ to $f_L/2$] U = upper range [$f_L/2$ to f_U]
m = mid band [$2f_L$ to $f_U/2$]

Typical Performance Data

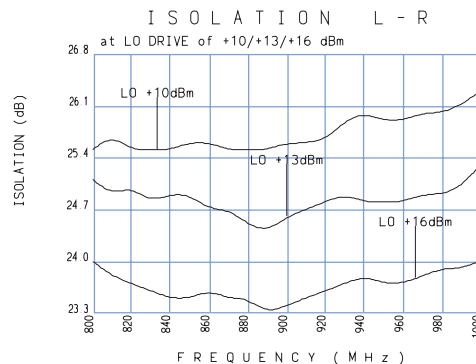
Frequency		Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	VSWR LO port (:1)	VSWR RF port (:1)
RF MHz	LO MHz	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm	LO +13dBm
800.00	830.00	7.35	25.10	17.20	2.27	3.21
810.00	840.00	7.10	24.90	17.20	2.23	3.16
820.00	850.00	7.03	25.00	17.20	2.25	3.26
830.00	860.00	6.91	24.80	17.20	2.23	3.21
840.00	870.00	6.87	24.90	17.30	2.20	3.26
850.00	880.00	6.83	24.90	17.40	2.16	3.38
860.00	890.00	6.73	24.70	17.50	2.16	3.32
870.00	900.00	6.71	24.70	17.40	2.14	3.38
880.00	910.00	6.62	24.50	17.50	2.10	3.38
890.00	920.00	6.54	24.40	17.50	2.12	3.32
900.00	930.00	6.65	24.60	17.50	2.08	3.38
920.00	950.00	6.69	24.80	17.50	2.12	3.38
930.00	960.00	6.67	24.90	17.80	2.14	3.38
940.00	970.00	6.61	24.80	17.70	2.14	3.32
950.00	980.00	6.72	24.80	17.80	2.14	3.38
960.00	990.00	6.61	24.80	17.70	2.10	3.44
970.00	1000.00	6.76	24.90	17.60	2.06	3.44
980.00	1010.00	6.75	24.90	17.50	2.08	3.50
990.00	1020.00	6.77	25.00	17.50	2.06	3.44
1000.00	1030.00	6.86	25.30	17.40	2.04	3.64

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