

# M/A-COM E-Series Surface Mount Mixer

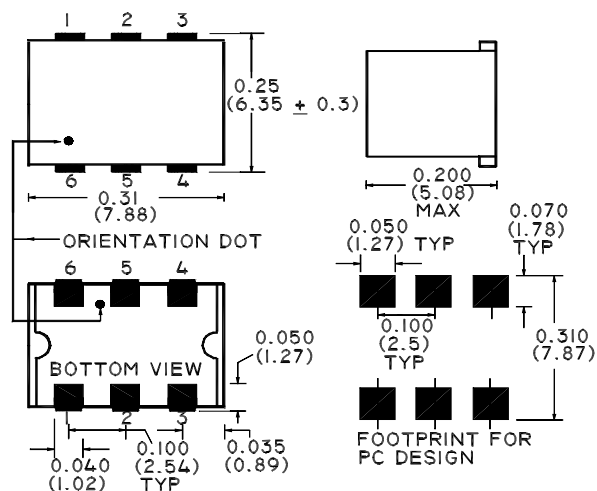
## 0.5—500 MHz

### Features

- LO Power +3 dBm
- Up to -1 dBm RF
- Surface Mount



### SM-1 Package



### Description

M/A-COM's EMRS-1L is a low drive, surface mount mixer suitable for use in wireless applications.

### Electrical Specifications @ -55°C - +100°C, $Z_0 = 50$ Ohms, LO = +3dBm

Parameter	Units	Minimum	Typical	Maximum
Frequency Range (1)				
RF 0.5 -500 MHz	MHz	—	—	—
LO 0.5 -500 MHz	MHz	—	—	—
IF DC- 500	MHz	—	—	—
Conversion Loss				
1-250 MHz	dB	—	7.0	7.5
0.5-500 MHz	dB	—	7.5	8.5
Isolation (LO - RF)				
0.5 -5MHz	dB	50	55	—
5-250 MHz	dB	33	25	—
250 -500 MHz	dB	27	20	—
Isolation (LO - IF)				
0.5 -5MHz	dB	55	45	—
5-250 MHz	dB	30	23	—
250 -500 MHz	dB	24	19	—

### Operating Characteristics

Impedance	50 Ohms Nominal
RF Input for 1dB Compression	-1dBm

### Ordering Information

Part No.	Packaging
EMRS-1L	Tubes
EMRS-1LTR	Forward Tape & Reel

Specifications subject to change without notice.

S 0045 D

V 4.0

4

- North America: Tel. (800) 366-2266, Fax (800) 618-8883
- Asia/Pacific: Tel.+81-44-844-8296, Fax +81-44-844-8298
- Europe: Tel. +44 (1344) 869 595, Fax+44 (1344) 300 020

Visit [www.macom.com](http://www.macom.com) for additional data sheets and product information.

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**Absolute Maximum Ratings**

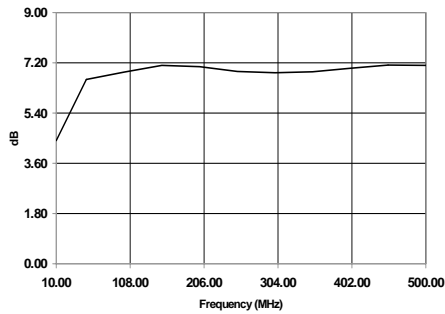
Parameter	Absolute Maximum
RF Power	50 mW
Peak IF Current	40 mA
Storage Temperature	-55°C to +100°C
Operating Temperature	-55°C to +100°C
Pin Temperature (10 Seconds)	260°C

**Functional Configuration**

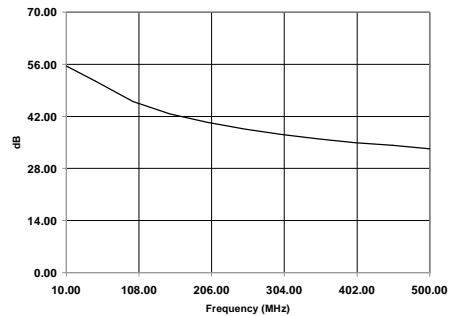
Function	Pin No.
LO	1
RF	4
IF	5
Ground	2, 3, 6
Case Ground	—
Unconnected	—

**Typical Performance @ +25°C**

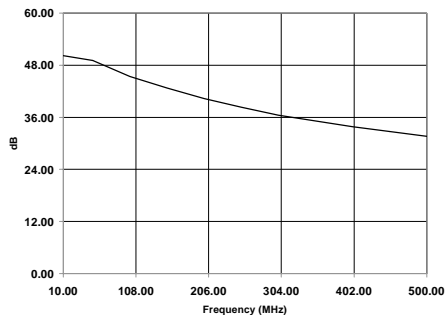
**Conversion Loss**



**L-R Isolation**



**L-I Isolation**



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