

M/A-COM E-Series Surface Mount Mixer

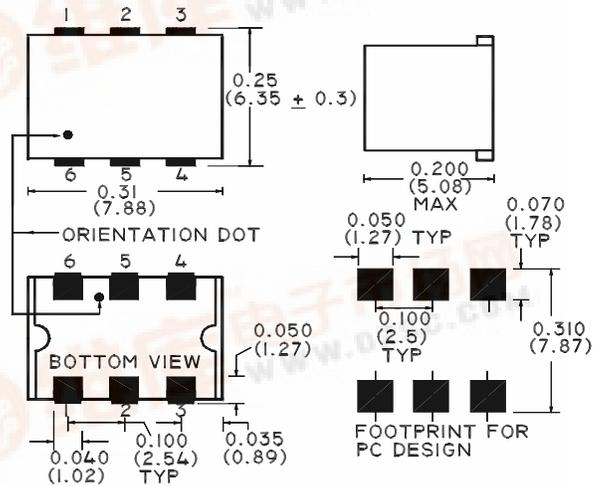
0.5—500 MHz

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, Z₀ = 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 |

Absolute Maximum Ratings

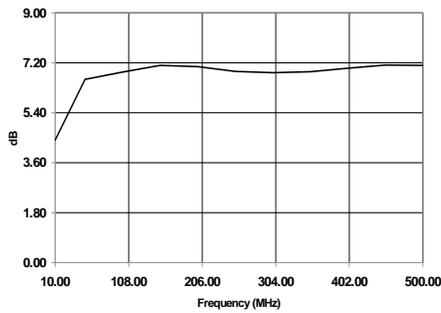
Parameter	Absolute Maximum
RF Power	50 mW
Peak IF Current	40 mA
Storage Temperature	-55°C to +100°C
Operating Temperature	-55°C to +100°C
Pin Temperature (10 Seconds)	260°C

Functional Configuration

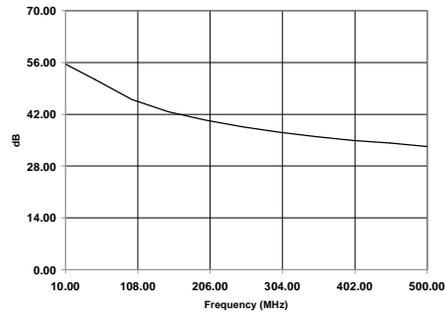
Function	Pin No.
LO	1
RF	4
IF	5
Ground	2, 3, 6
Case Ground	—
Unconnected	—

Typical Performance @ +25°C

Conversion Loss



L-R Isolation



L-I Isolation

