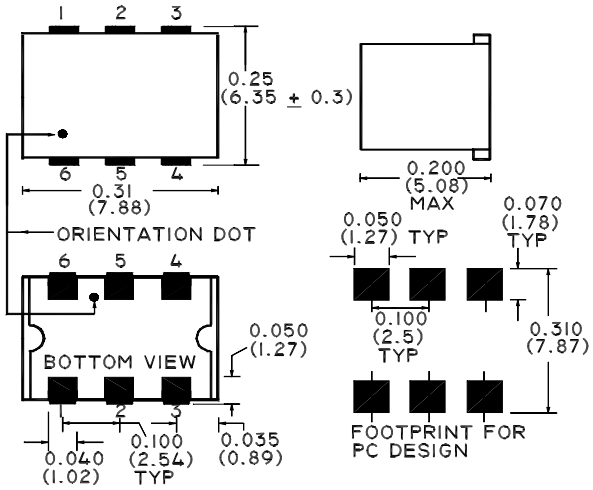
E-Series Surface Mount Mixer
0.5—500 MHz

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

S 0045 D

Specifications subject to change without notice.

V 4.0

■ **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 for additional data sheets and product information.

tyco Electronics

M/A-COM

Absolute Maximum Ratings

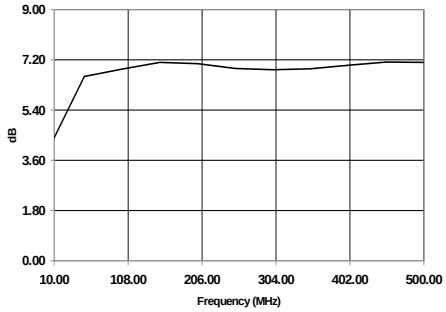
Parameter	Absolute Maximum
RF Power	50 mW
Peak IF Current	40 mA
Storage Temperature	-55°C to +100°C
Operating Temperature	-55°C to +100°C
Pin Temperature (10 Seconds)	260°C

Functional Configuration

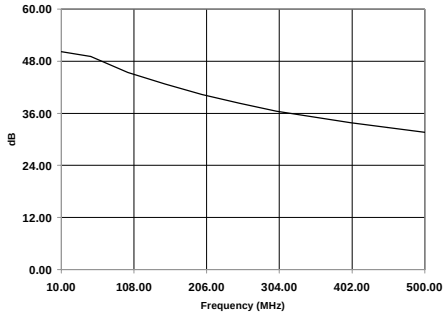
Function	Pin No.
LO	1
RF	4
IF	5
Ground	2, 3, 6
Case Ground	—
Unconnected	—

Typical Performance @ +25°C

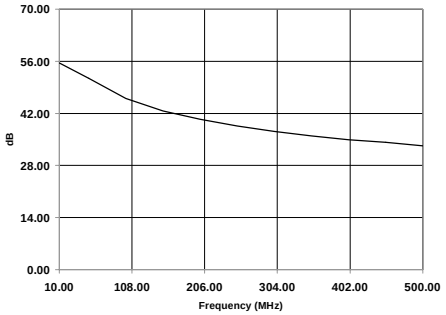
Conversion Loss



L-I Isolation



L-R Isolation



Specifications subject to change without notice.

- **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 for additional data sheets and product information.

tyco Electronics
MACOM