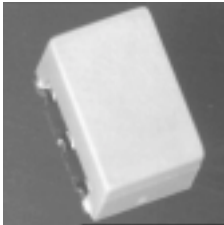


# M/A-COM E-Series Surface Mount Mixer

## 5 – 2500 MHz

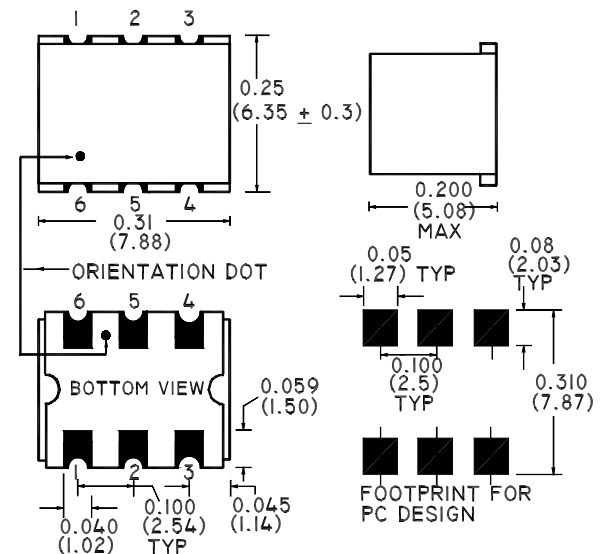
### Features

- LO Power +13 dBm
- Up to +9 dBm RF
- Surface Mount



### SM-87 Package

Note: Non Hermetic Package



### Description

M/A-COM's ELCM-25MH is a Low Cost, Broadband, high performance Double Balanced Mixer designed for use in high volume wireless applications. The device has been optimised by careful selection of the Schottky Diode and Balun Transformer for excellent performance. ELCM-25MH is available in an SM-87 surface mount package and reflows using standard soldering reflow profiles.

### Electrical Specifications @ +25°C, Z<sub>0</sub> = 50 Ohms, LO = +13dBm

Parameter	Units	Minimum	Typical	Maximum
Frequency Range				
RF	5 - 2500	—	—	—
LO	5 - 2500	—	—	—
IF	5 - 500	—	—	—
Conversion Loss				
10 - 1250	dB	—	6.3	8.5
5 - 2500	dB	—	7.3	9.8
Isolation (LO - RF)				
5 - 50	MHz	28	45	—
50 - 1250	MHz	23	35	—
1250 - 2500	MHz	20	30	—
Isolation (LO - IF)				
5 - 50	MHz	23	40	—
50 - 1250	MHz	20	30	—
1250 - 2500	MHz	17	25	—
LO VSWR				
5 - 1000 MHz	—	—	2.32	2.60
1000 - 2500 MHz	—	—	2.67	3.10
RF VSWR				
5 - 1000 MHz	—	—	2.80	3.50
1000 - 2500 MHz	—	—	3.80	4.50
IF VSWR	DC - 500 MHz	—	1.50	1.90
RF Input for 1dB Compression	dBm	—	—	+9

Specifications subject to change without notice.

V4.00 S 1354 D

- 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

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

This datasheet has been downloaded from <http://www.digchip.com> at this page

### Absolute Maximum Ratings

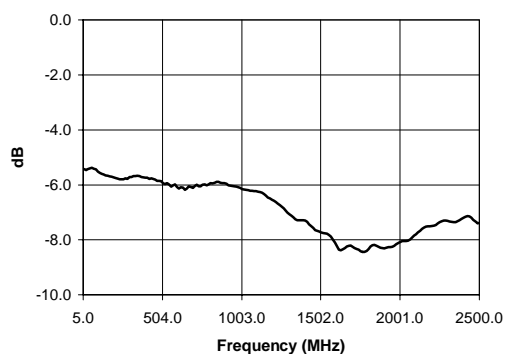
Parameter	Absolute Maximum
RF Power	150 mW
Peak IF Current	40 mA
Storage Temperature	-55°C to +100°C
Operating Temperature	-55°C to +100°C
Pin Temperature (10 Seconds)	260°C

### Functional Configuration

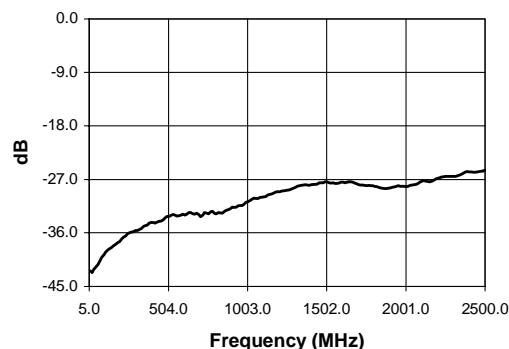
Function	Pin No.
LO	1
RF	4
IF	5
Ground	2, 3, 6
Case Ground	—
Unconnected	—

### Typical Performance @ +25°C

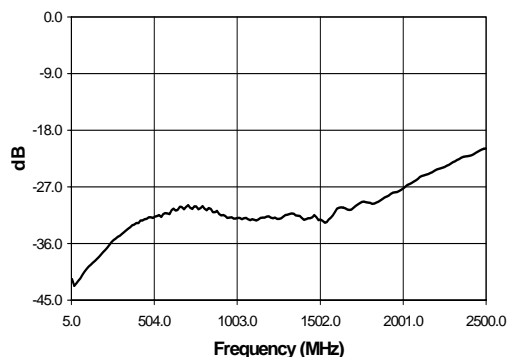
#### Conversion Loss



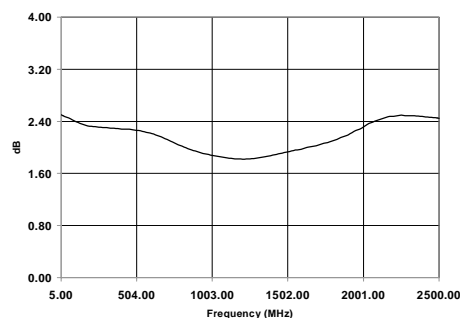
#### L-R Isolation



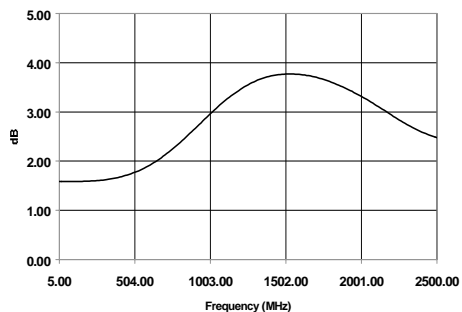
#### L-X Isolation



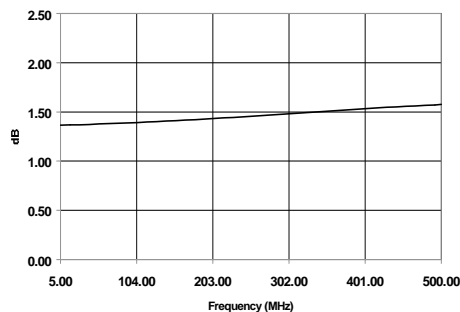
#### LO VSWR



#### RF VSWR



#### IF VSWR



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