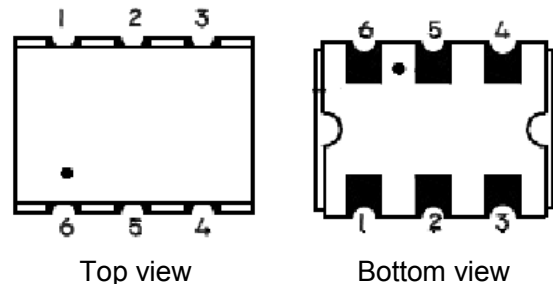


## E-Series Surface Mount Mixer 0.5 – 500 MHz

Rev. V1

### Features

- LO Power +17 dBm
- Up to +14 dBm RF
- Low Profile
- Surface Mount
- Tape and reel packaging available
- 260°C Reflow Compatible
- RoHS\* compliant version of the ELCM-1HTR



### Description

The MAMX-007607-ELCM1H is a broadband, high performance double balanced mixer designed for use in high volume wireless applications. The device has been optimized by careful selection of the Schottky diode and Balun transformer for excellent performance. The mixer is available in an SM-87 surface mount package and is designed to be utilized in both standard reflow and high temperature soldering reflow profiles. Parts are packaged in tape and reel.

### Pin Configuration

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

### Electrical Specifications: $T_A = 25^\circ\text{C}$ , $Z_0 = 50 \Omega$ , LO = +17 dBm

Parameter	Test Conditions	Units	Min.	Typ.	Max.
RF & LO Frequency	—	MHz	0.5	—	500
IF Frequency	—	MHz	DC	—	500
Conversion Loss	1 - 250 MHz	dB	—	6.8	7.5
	250 - 500 MHz			7.2	8.0
Isolation - LO to RF	0.5 - 5 MHz	dB	50	55	—
	5 - 250 MHz		35	40	
	250 - 500 MHz		30	35	
Isolation - LO to IF	0.5 - 5 MHz	dB	45	55	—
	5 - 250 MHz		30	35	
	250 - 500 MHz		27	35	
Input 1 dB Compression	0.5 - 500 MHz	dBm	—	—	14

### Ordering Information

Part Number	Package
MAMX-007607-ELCM1H	900 piece reel

### Absolute Maximum Ratings<sup>1,2</sup>

Parameter	Absolute Maximum
RF Power	200 mW
Peak IF Current	40 mA
Operating Temperature	-55°C to +85°C
Storage Temperature	-65°C to +125°C

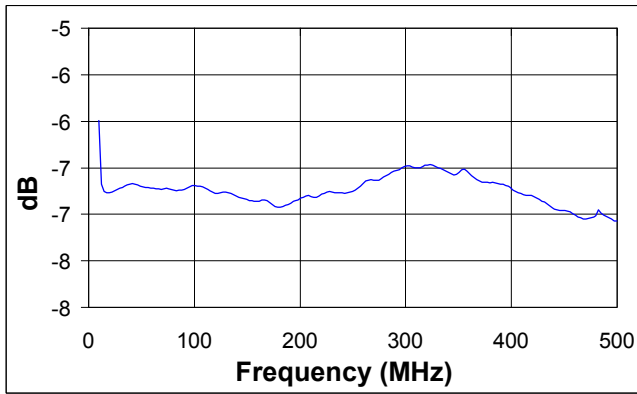
1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. MACOM does not recommend sustained operation near these survivability limits.

## E-Series Surface Mount Mixer 0.5 – 500 MHz

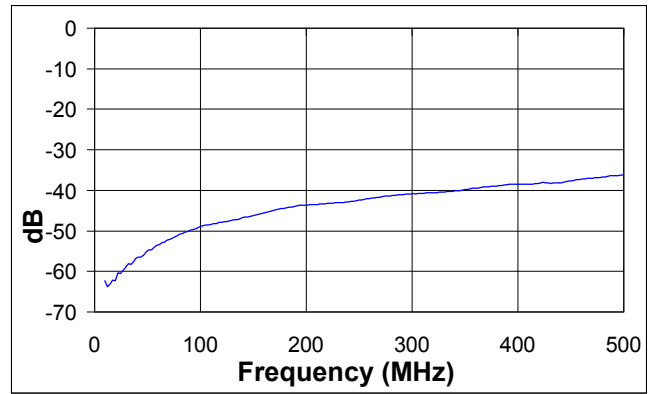
Rev. V1

### Typical Performance Curves

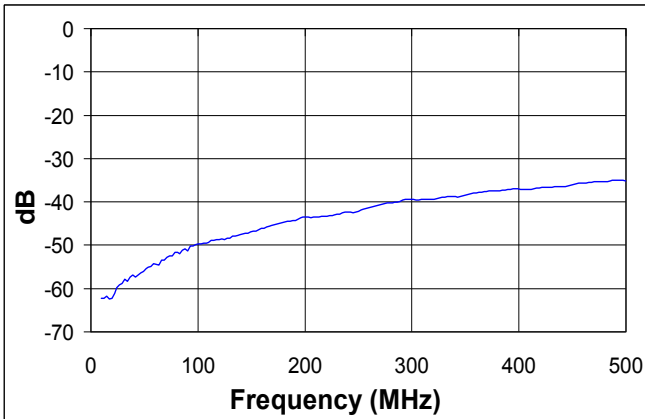
Conversion Loss



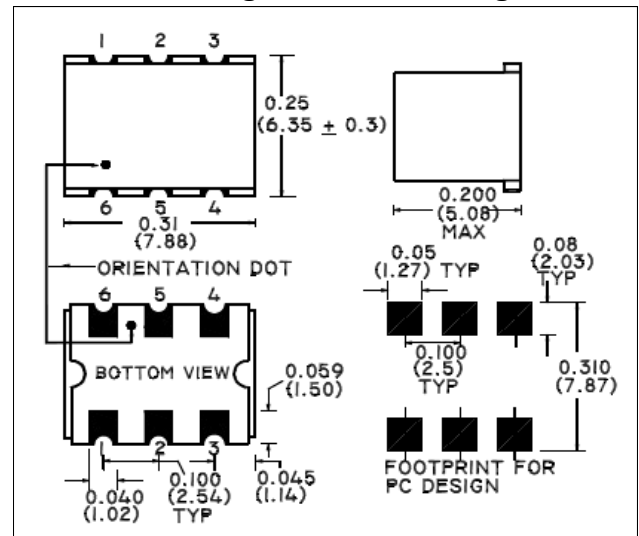
LO - RF Isolation



LO - IF Isolation



### Outline Drawing: SM - 87 Package



MACOM Technology Solutions Inc. All rights reserved.

Information in this document is provided in connection with MACOM Technology Solutions Inc ("MACOM") products. These materials are provided by MACOM as a service to its customers and may be used for informational purposes only. Except as provided in MACOM's Terms and Conditions of Sale for such products or in any separate agreement related to this document, MACOM assumes no liability whatsoever. MACOM assumes no responsibility for errors or omissions in these materials. MACOM may make changes to specifications and product descriptions at any time, without notice. MACOM makes no commitment to update the information and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to its specifications and product descriptions. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document.

THESE MATERIALS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, RELATING TO SALE AND/OR USE OF MACOM PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, CONSEQUENTIAL OR INCIDENTAL DAMAGES, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. MACOM FURTHER DOES NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE INFORMATION, TEXT, GRAPHICS OR OTHER ITEMS CONTAINED WITHIN THESE MATERIALS. MACOM SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR LOST PROFITS, WHICH MAY RESULT FROM THE USE OF THESE MATERIALS.

MACOM products are not intended for use in medical, lifesaving or life sustaining applications. MACOM customers using or selling MACOM products for use in such applications do so at their own risk and agree to fully indemnify MACOM for any damages resulting from such improper use or sale.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [RF Mixer](#) category:*

*Click to view products by [MACOM](#) manufacturer:*

Other Similar products are found below :

[HMC337-SX](#) [mamx-009646-23dbm1](#) [MC4507-2](#) [HMC339-SX](#) [CSM5T](#) [CHR3664-QEG](#) [HMC8192-SX](#) [MIQ24MS-2](#) [M85C](#) [M74C](#) [MD-174-PIN](#) [HMC554A-SX](#) [HMC521A-SX](#) [HMC521ACHIPS](#) [HMC558A](#) [HMC8191](#) [CMD258C4](#) [CMD258](#) [LT5511EFE](#) [MAMX-011023-SMB](#) [HMC399MS8TR](#) [HMC333TR](#) [HMC214MS8TR](#) [HMC175MS8TR](#) [HMC1043LC3TR](#) [MAMXSS0012TR-3000](#) [109728-HMC129LC4](#) [CSM2-13](#) [CSM1-13](#) [SA612AD/01.112](#) [HMC785LP4ETR](#) [LT5526EUF#PBF](#) [LT5579IUH#PBF](#) [HMC773ALC3BTR](#) [HMC558ALC3B](#) [HMC329ALC3B](#) [MY63H](#) [SMA5101-TL-H](#) [AD8343ARUZ-REEL7](#) [AD608AR](#) [AD608ARZ](#) [AD831APZ-REEL7](#) [AD8342ACPZ-REEL7](#) [AD8343ARUZ](#) [AD8344ACPZ-REEL7](#) [ADL5363ACPZ-R7](#) [ADL5365ACPZ-R7](#) [ADL5801ACPZ-R7](#) [ADL5802ACPZ-R7](#) [HMC1048ALC3B](#)