

E-Series Surface Mount Mixer 5-2500 MHz

M/A-COM Products
Advanced - Rev. V4

Features

- LO Power +13 dBm
- Up to +9 dBm RF
- Surface Mount
- Tape and reel packaging available
- 260°C Reflow Compatible
- RoHS* compliant version of the ELCM-25MH

Product Image



Description

M/A-COM's MAMX-007238-CM25MH is a RoHS Compliant Low Cost, Broadband, high performance Double 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 MAMX-007238-CM25MH 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 & reel.

Ordering Information

Part Number	Package
MAMX-007238-CM25MH	Tape and Reel (900 piece Reel)

Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 50\Omega$, LO = +13 dBm

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
RF Frequency	—	5 - 2500	MHz	—	—	—
LO Frequency	—	5 - 2500	MHz	—	—	—
IF Frequency	—	5 - 1500	MHz	—	—	—
Conversion Loss	—	10 - 1250 5 - 2500	dB dB	— —	6.3 7.3	8.5 9.8
Isolation	LO to RF	5 - 50 50 - 1250 1250 - 2500	dB dB dB	28 23 20	45 35 30	— — —
Isolation	LO to IF	5 - 50 50 - 1250 1250 - 2500	dB dB dB	23 20 17	40 30 25	— — —
Input 1 dB Compression	—	5 - 2500	dBm	—	—	9

Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Power	150 mW
Peak IF Current	40 mA
Operating Temperature	-55°C to +85°C
Storage Temperature	-65°C to +125°C

Pin Configuration

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

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

MAMX-007238-CM25MH



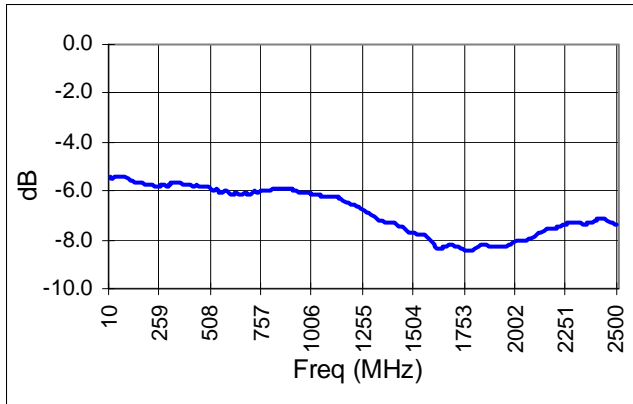
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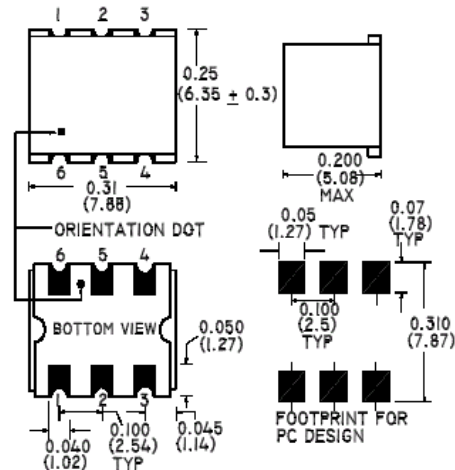
Typical Performance Curves at +25°C

SM - 87 Package

Conversion Loss

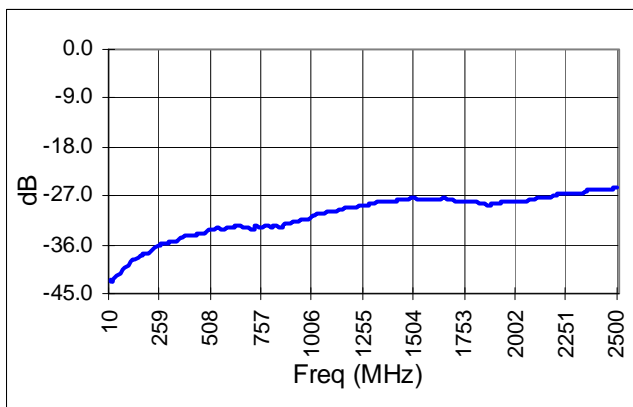


NOTE : NON HERMETIC PACKAGE

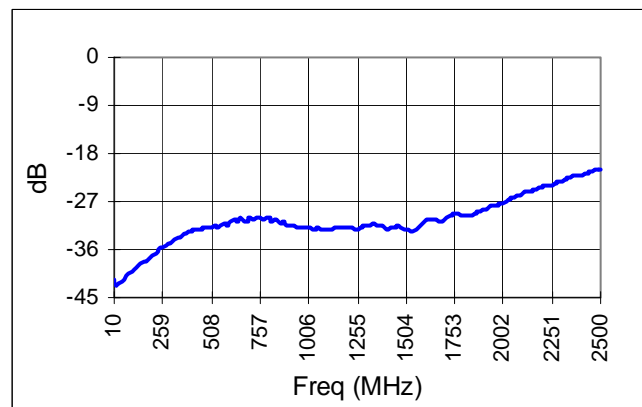


* Dimensions are inches (millimeters) ±0.015 (0.38) unless otherwise specified.

LO - RF Isolation



LO - IF Isolation



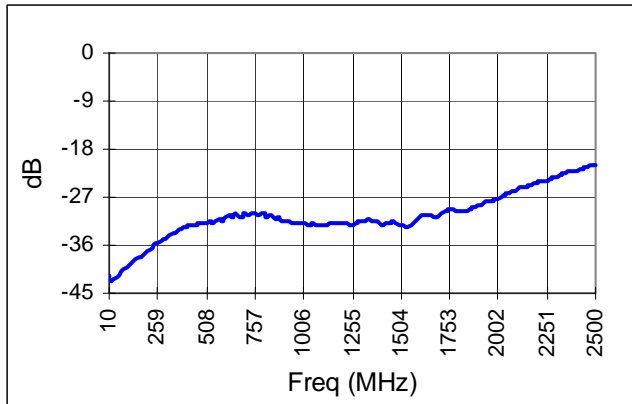
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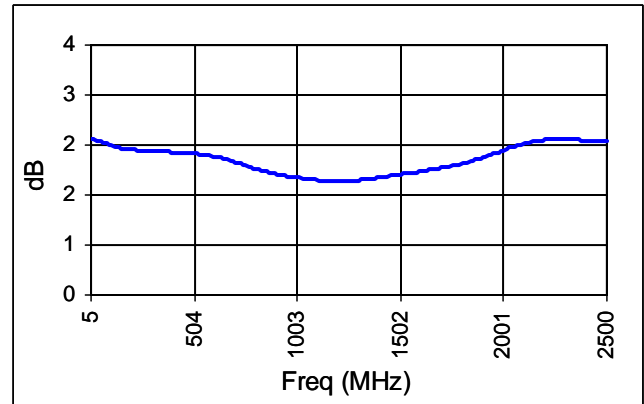
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Typical Performance Curves

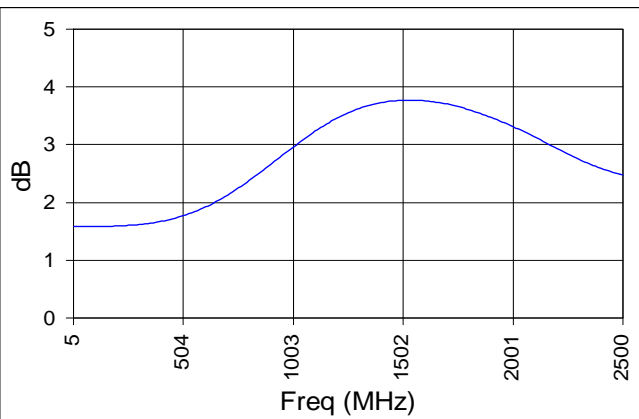
LO - IF Isolation



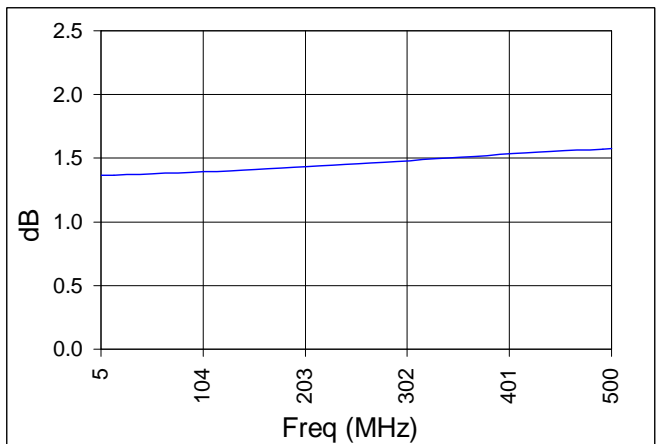
LO VSWR



RF VSWR



IF VSWR



IP3

