

## E-Series Surface Mount Mixer 10 - 2500 MHz

Rev. V3

### Features

- LO Power +17 dBm
- Up to +13 dBm RF
- Surface Mount
- Wide Frequency Band
- RoHS\* Compliant
- Tape and Reel Packaging



### Description

The MAMX-009239-001500 is a high drive, surface mount mixer designed for use in high volume wireless applications.

This device is designed to be utilized in both standard reflow and high temperature soldering reflow profiles.

### Pin Configuration

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

### Electrical Specifications: RF Freq. = 10 - 2500 MHz, $T_A = 25^\circ\text{C}$ , $Z_0 = 50 \Omega$ , LO = 17 dBm

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Conversion Loss	Low Range, 10 - 1250 MHz Upper Range, 1250 - 2500 MHz	dB	—	5.5 7.6	7 9
LO-IF Isolation	Low Range, 10 - 1250 MHz Upper Range, 1250 - 2500 MHz	dB	30 23	40 30	—
LO-RF Isolation	Low Range, 10 - 1250 MHz Upper Range, 1250 - 2500 MHz	dB	35 23	40 35	—
IIP3	10 - 2500 MHz	dBm	23	25	31
RF Input for 1 dB Compression	10 - 2500 MHz	dBm	—	—	13

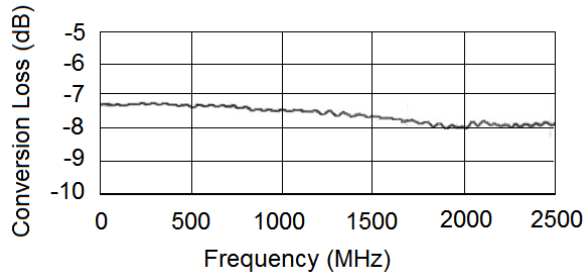
### Ordering Information

Part Number	Package
MAMX-009239-001500	900 piece reel

### Absolute Maximum Ratings

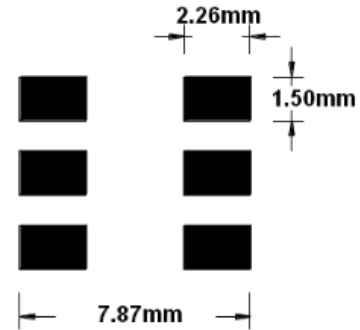
Parameter	Value
RF Power	50 mW
Peak IF Current	40 mA
Pin Temperature	260°C, 10 seconds
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +125°C

## Typical Performance Curves<sup>1</sup>

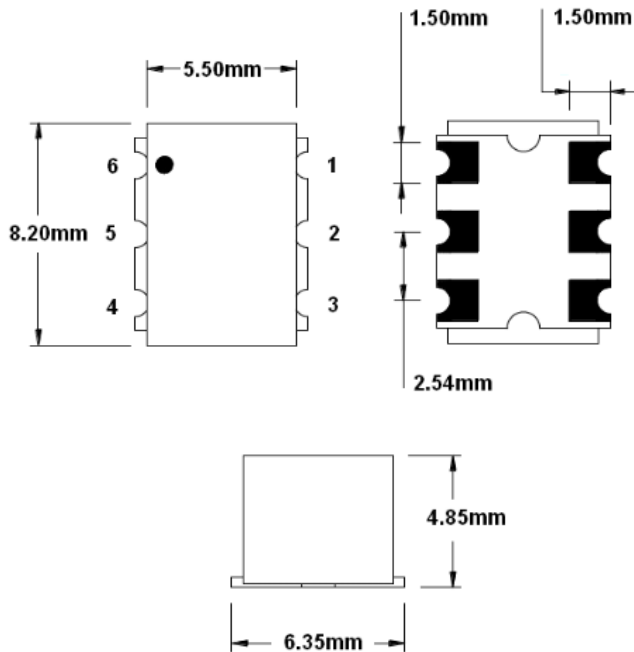


1. Full temperature plots available on request.

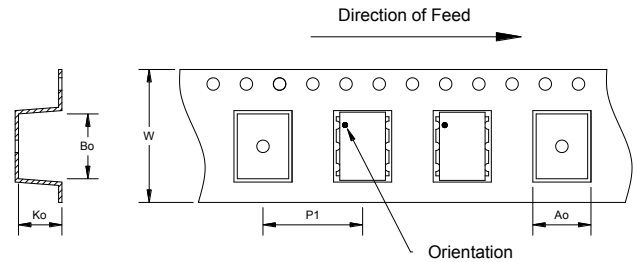
## Recommended Board Layout



## Outline Drawing



## Carrier Tape Orientation



## Tape & Reel Information

Parameter	Units	Value
Qty per reel	-	900
Ao	mm	7.00 +/-0.1
Bo	mm	8.60 +/-0.1
Ko	mm	5.23 +/-0.1
W	mm	16.00 +/-0.3
P1	mm	12.00 +/-0.1

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