

E-Series Surface Mount Mixer 10 – 2500 MHz

Rev. V1

Features

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

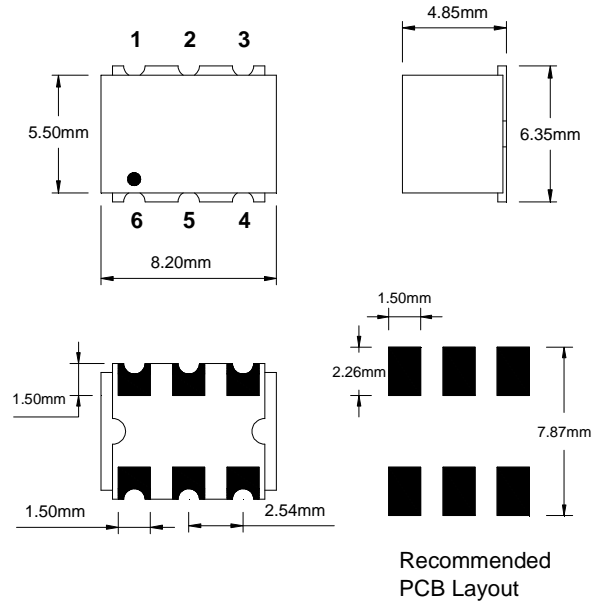
Description

M/A-COM Technology Solutions MAMX-009239-001500 is a Low Cost, High Drive, surface mount Mixer designed for use in high volume wireless applications.

The MAMX-009239-001500 mixer is offered in a surface mount package and is designed to be utilized in both standard reflow and high temperature soldering reflow profiles.



Component Dimensions



Dimensions in mm, Tolerance: .xx ± 0.3, unless otherwise stated. Drawing not to scale.

Pin Configuration

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

Recommended Maximum Ratings^{1,2}

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

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

* Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

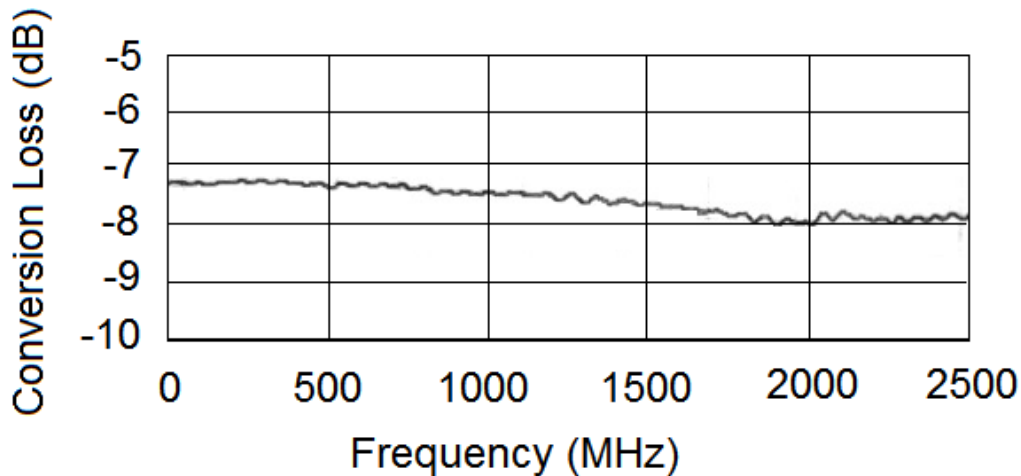
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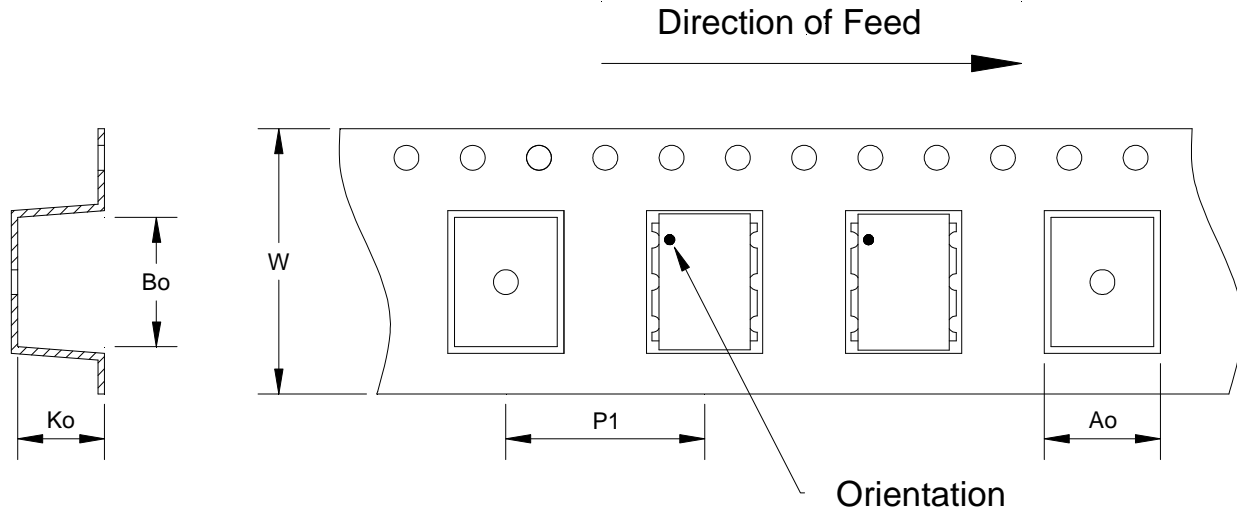
Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 50\ \text{Ohms}$, $LO = +17\text{dBm}$

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

Typical Performance Curves @ +25°C



Tape & Reel Information



Item	Dimension
Ao	7.00mm +/- 0.1mm
Bo	8.60mm +/- 0.1mm
Ko	5.23mm +/- 0.1mm
W	16.00mm +/- 0.3mm
P1	12.00mm +/- 0.1mm

Ordering Information

Part Number	Package
MAMX-009239-001500	Tape and Reel 900 pieces