MAMXES0108

E-Series Mixer
0.5-500 MHz

Rev. V3

Features

- Up to +1dBm RF
- +3-5 dBm LO Drive
- Low Profile
- Tape and reel packaging available
- 260°C Reflow Compatible

Description

M/A-COM Technology Solutions MAMXES0108 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. MAMXES0108 is available in an SM-89 surface mount package and reflows using standard soldering.

Product Image

Absolute Maximum Ratings [1,2]

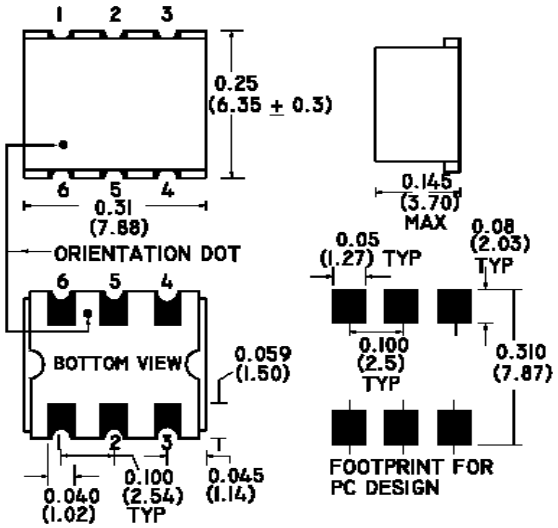
Parameter	Absolute Maximum
Impedance	50 Ohms nominal
RF Power	1 Watt
Internal Load Dissipation	0.125 Watt
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +125°C

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

Pin Configuration

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

Component Dimensions



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

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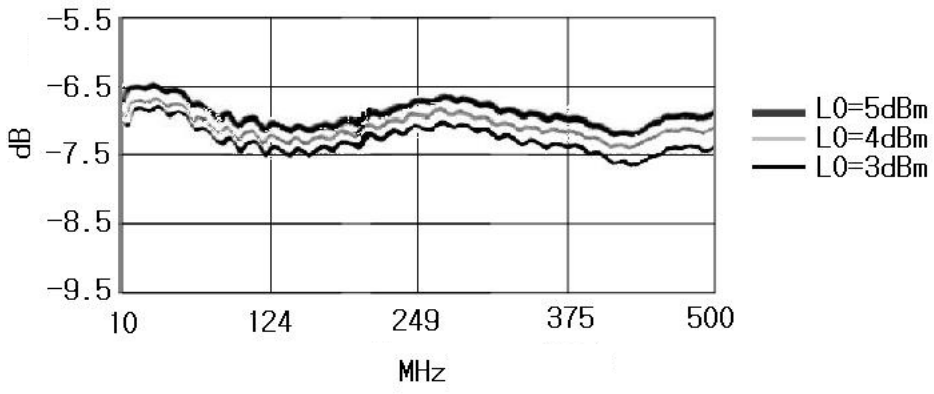
Electrical Specifications: T_A = 25°C, Z_0 = 50Ω
LO=+3,4,5dBm

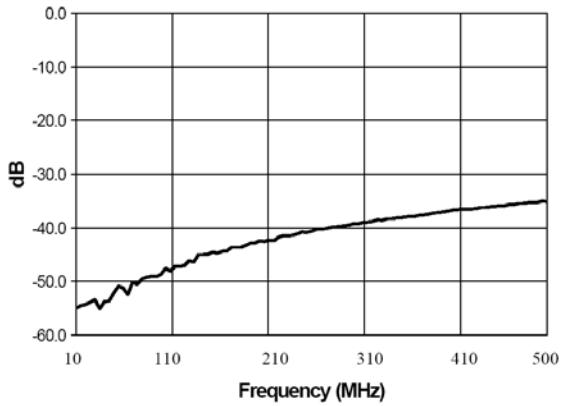
Parameter	Frequency	Units	Min.	Typ.	Max.
Conversion Loss	0.5 - 500MHz (LO=5dBm) 0.5 - 500MHz (LO=4dBm) 0.5 - 500MHz (LO=3dBm)	dB dB dB	6.2 6.2 6.2	7.0 7.15 7.30	7.8 7.8 7.8
LO-RF Isolation	0.5 - 500MHz	dB	30	40	—
LO-IF Isolation	0.5 - 500MHz	dB	30	40	—
1dB Compression		dBm	—	—	+1

Typical Performance Curves

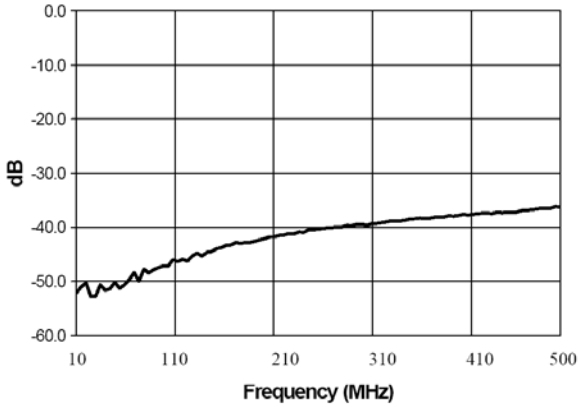
Conversion Loss



LO-RF Isolation



LO-IF Isolation



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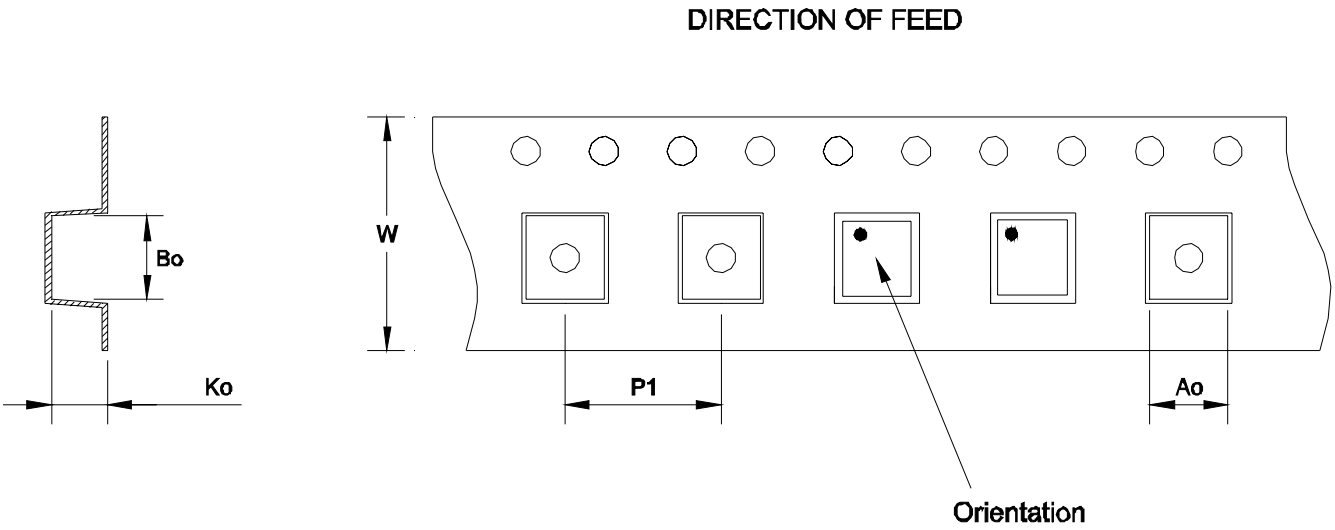
Tape Specification



Item	Dimension
Ao	7.00mm +/-0.1mm
Bo	8.60mm +/-0.1mm
Ko	3.90mm +/-0.1mm
W	16.00mm +/-0.3mm
P1	12.00mm +/-0.1mm

Ordering Information

Part Number	Package
MAMXES0108	Tape and Reel (900 piece Reel)

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