

E-Series Mixer, 0.5 - 500 MHz



MAMXES0108

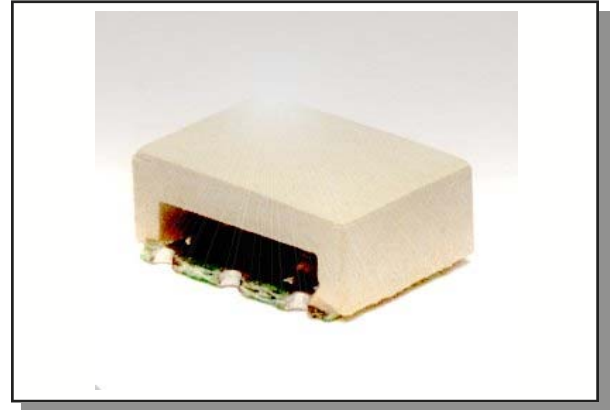
Features

- n Up to +1dBm RF
- n Small SMT footprint
- n +5 dBm LO Drive
- n Low Profile

Description

M/A-COM's 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

SM89



Pin Configuration

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

Absolute Maximum Ratings ¹

Parameter	Absolute Maximum
RF Power	50mW
Peak IF Current	40 mA
Operating Temperature	-55°C to +100°C
Storage Temperature	-55°C to +100°C

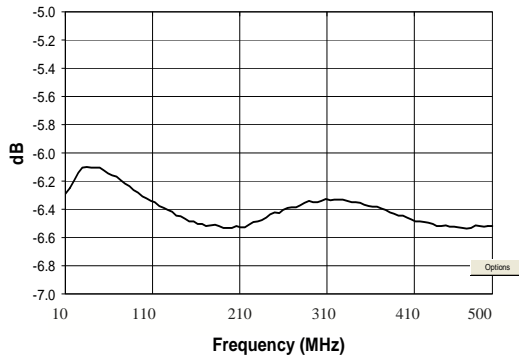
1. Operation of this device above any one of these parameters may cause permanent damage.

Electrical Specifications: $T_A = 25^\circ\text{C}$, Impedance = 50 Ohms, LO Drive = +5 dBm

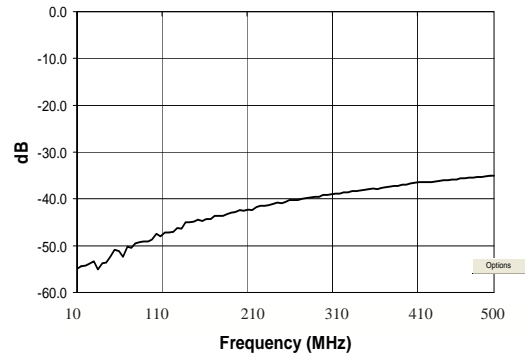
Parameter	Frequency (MHz)	Units	Minimum	Typical	Maximum
Frequency Range	RF: 0.5-500	—	—	—	—
	LO: 0.5-500	—	—	—	—
	IF: DC-500	—	—	—	—
Conversion loss	1-250	dB	—	6.0	7.5
	0.5-500	dB	—	6.2	7.8
L-R Isolation	0.5-5	dB	50	55	—
	5-250	dB	35	45	—
	250-500	dB	30	35	—
L-I Isolation	0.5-5	dB	45	55	—
	5-250	dB	35	45	—
	250-500	dB	25	30	—
1 dB Compression		dBm	—	—	+1

Typical Performance Curves

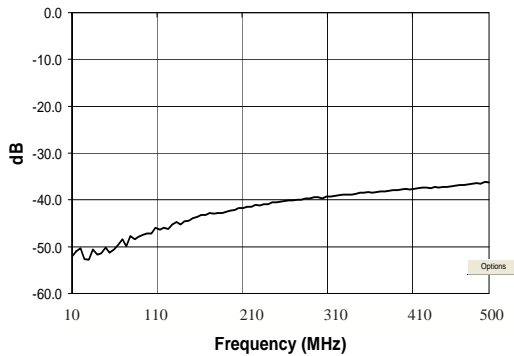
Conversion Loss



LO - RF Isolation

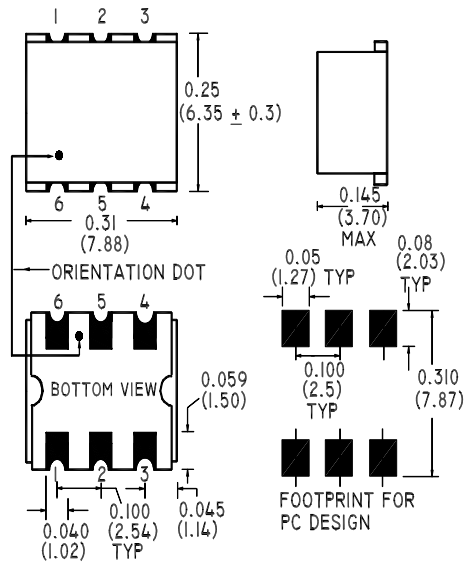


LO - IF Isolation



SM89

NOTE : NON HERMETIC PACKAGE



Ordering Information

Part Number	Package
MAMXES0108	Tape & Reel

ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

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