E-Series Surface Mount Mixer, 1 – 1000MHz

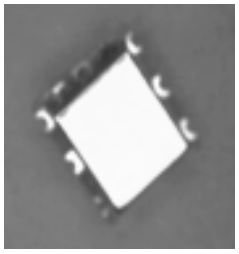
MAMXES0028 V3.0

Features

- LO Power +7dBm
- Up to +1 dBm RF
- Surface Mount
- Low Profile

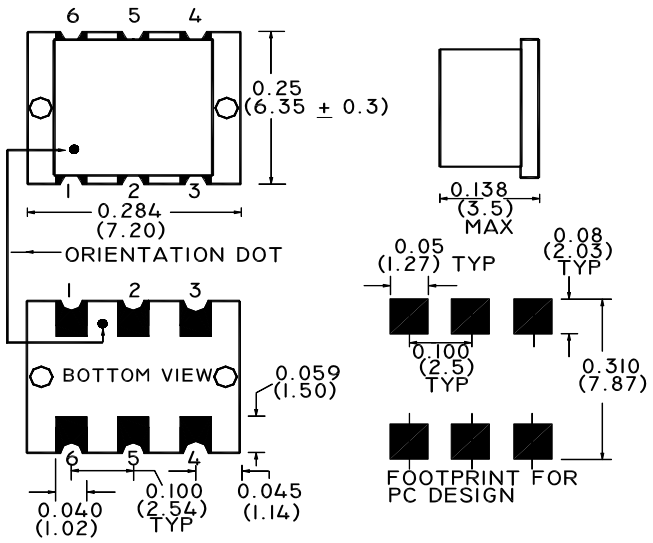
Description

M/A-COM's MAMXES0028 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. MAMXES0028 is available in an SM-134 surface mount package and reflows using standard soldering reflow profiles.



SM-134 Case Package

Note: Non Hermetic Package



Dimensions in inches [mm] Tolerance: .xx ± .02, .xxx ± .010

Electrical Specifications @ 25°C, Z_0 = 50 Ohms, LO = +7dBm

Parameter	Units	Minimum	Typical	Maximum
Frequency				
RF 1 – 1000	MHz	–	–	–
LO 1 – 1000	MHz	–	–	–
IF DC – 1000	MHz	–	–	–
Conversion Loss				
1 – 500	dB	–	6.5	7.5
500 – 1000	dB	–	7.5	8.5
Isolation (LO – RF)				
1 – 5	MHz	50	55	–
5 – 250	MHz	35	45	–
250 – 500	MHz	25	30	–
Isolation (LO – IF)				
1 – 5	MHz	50	55	–
5 – 250	MHz	35	45	–
250 – 500	MHz	25	30	–
RF Input for 1dB Compression	dBm	–	–	+1
Input IP3	dBm	14	18	–

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Absolute Maximum Ratings

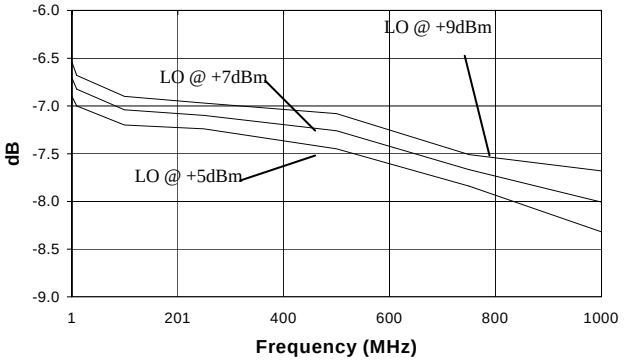
Parameter	Absolute Maximum
RF Power	50 mW
Peak IF Current	40 mA
Operating/Storage Temperature	-55° C to +100° C
Pin Temperature (10 Seconds)	260^0

Functional Configuration

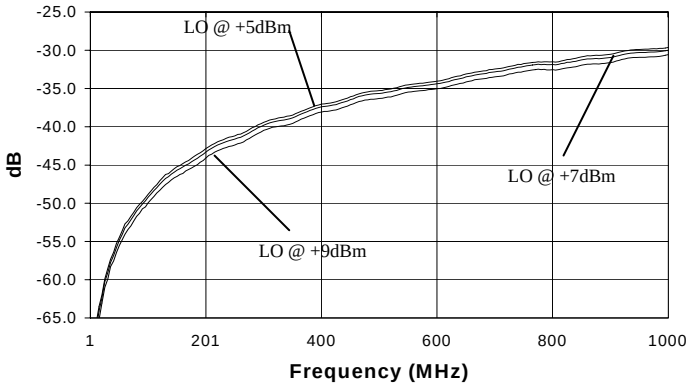
Function	Pin Number
LO	6
RF	3
IF	2
Ground	1,4,5
Case Ground	–
Unconnected	–

Typical Performance Curves @ +25°C

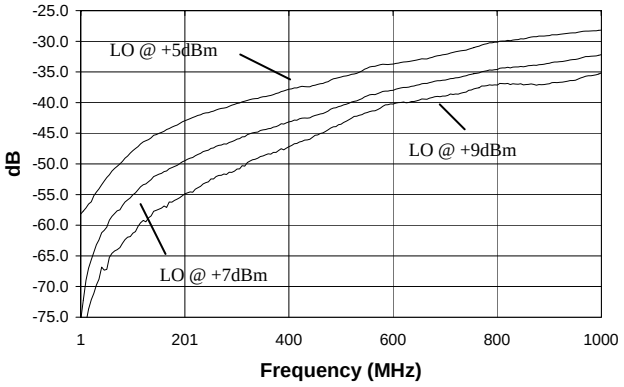
Conversion Loss



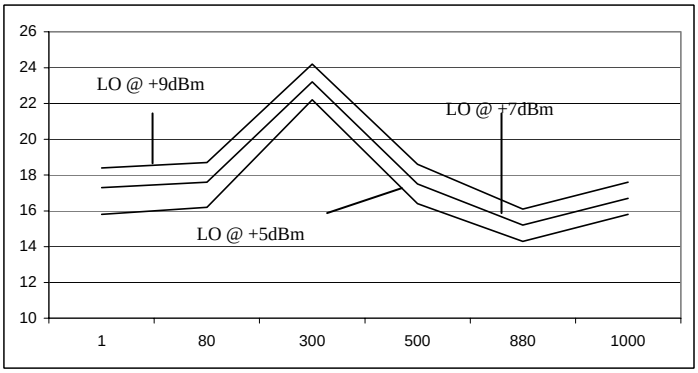
L-R Isolation



L- I Isolation



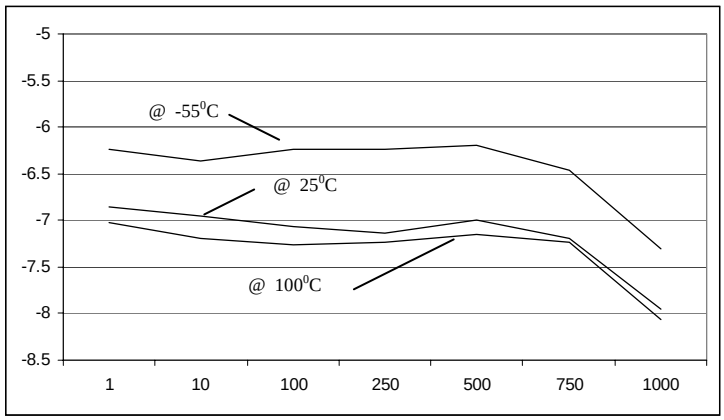
IIP3



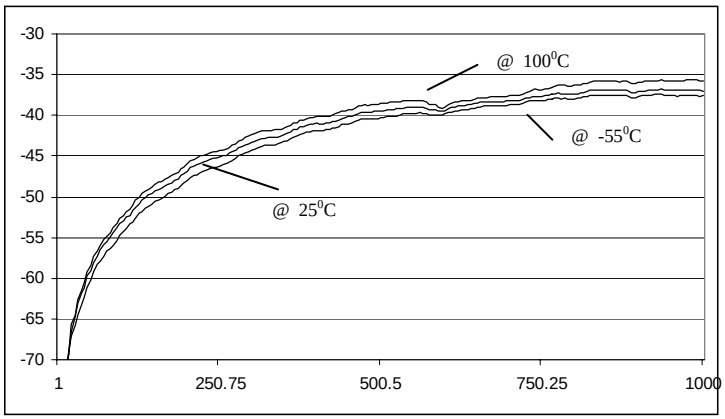
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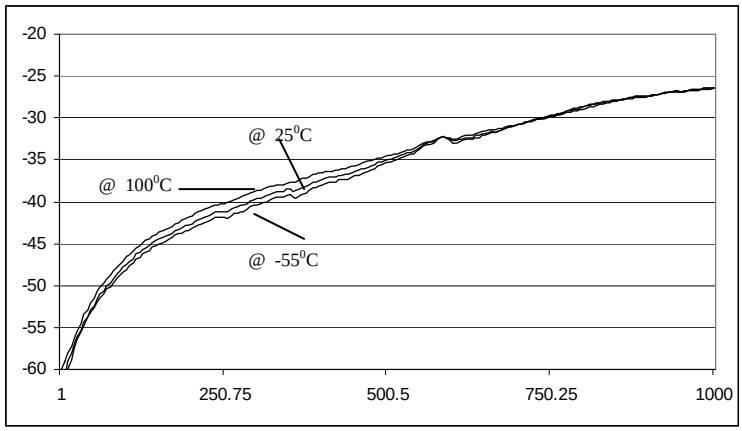
Conversion Loss



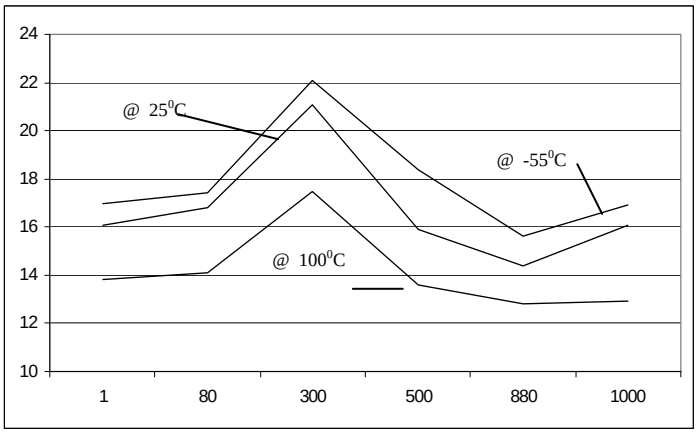
L-R Isolation



L- I Isolation



IIP3



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