

Features

- LO Power +7 dBm
- Up to +7 dBm RF
- Surface Mount
- RoHS* Compliant version of the EMRS-6X1
- Tape and reel packaging

Description

M/A-COM Technology Solutions part number MAMX-008782-ES0118 is a RoHS compliant device that is equivalent to the EMRS-6X1 mixer. This device is a Low Cost, Low Drive, surface mount Mixer designed for use in high volume wireless applications.

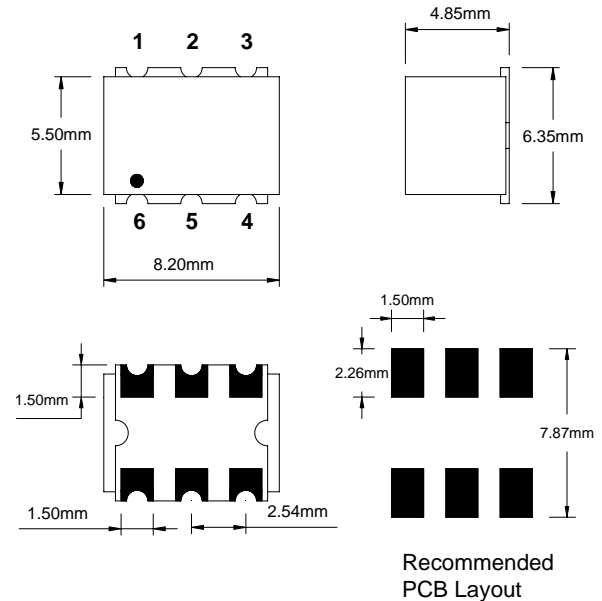
The MAMX-008782-ES0118 mixer is offered in a surface mount package and is designed to be utilized in both standard reflow and high temperature soldering reflow profiles.



Pin Configuration

Pin No.	Function
1	LO I/P
2	Ground
3	Ground
4	RF O/P
5	IF I/P
6	Ground

Component Dimensions



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

Recommended Maximum Ratings ^{1,2}

Parameter	Value
Max RF Power	50 mW
Peak IF Current	40 mA
Pin Temperature (10 sec)	260° C
Operating Temperature	-55°C to +100°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.

MAMX-008782-ES0118



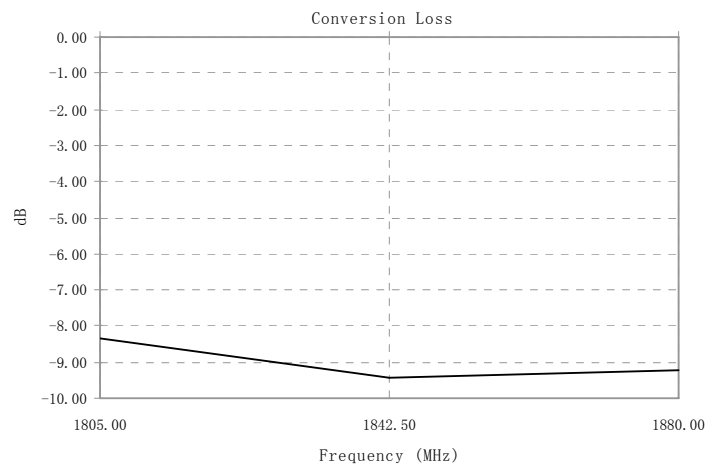
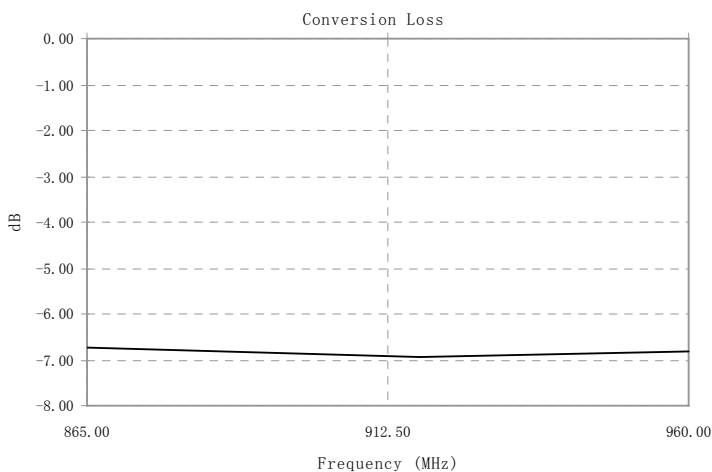
E-Series Surface Mount Mixer
925 – 960 MHz & 1805 – 1880

Rev. V3

Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 50\ \text{Ohms}$, $\text{LO} = +7\text{dBm}$

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
RF Frequency (1)	—	1805 - 1880	MHz	—	—	—
LO Frequency (1)	—	95	MHz	—	—	—
IF Frequency (1)	—	1710 - 1785	MHz	—	—	—
RF Frequency (2)	—	925 - 960	MHz	—	—	—
LO Frequency (2)	—	45	MHz	—	—	—
IF Frequency (2)	—	820 - 915	MHz	—	—	—
Conversion Loss	—	1805 - 1880	dB	8.5	9.5	11.0
		925 - 960	dB	6.5	7.0	9.0
Isolation	LO to RF	95 & 45	dB	25	35	55
Isolation	LO to IF	95 & 45	dB	25	30	40
Input 1 dB Compression	—	5 - 2500	dBm	—	—	7
RF VSWR	—	—	Ratio	1.3:1	2.4:1	3.0:1
LO VSWR	—	—	Ratio	1.4:1	1.6:1	1.8:1
IF VSWR	—	—	Ratio	1.1:1	1.4:1	1.8:1

Typical Performance Curves



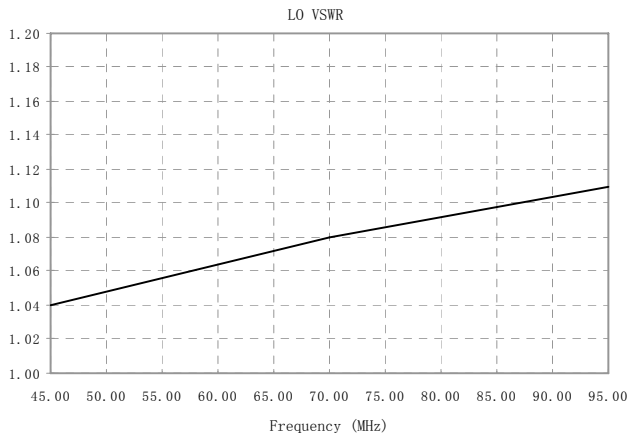
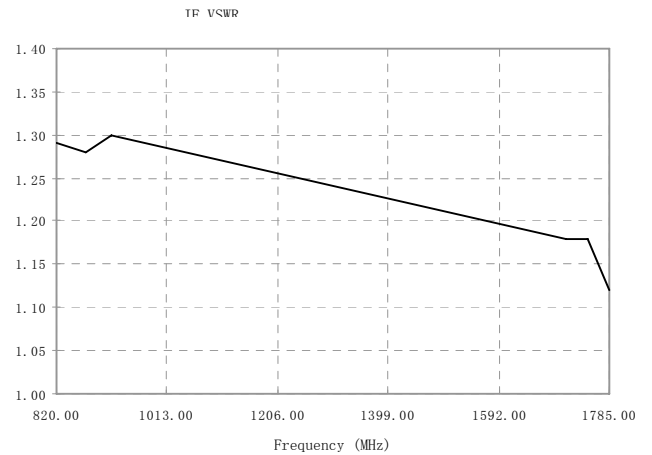
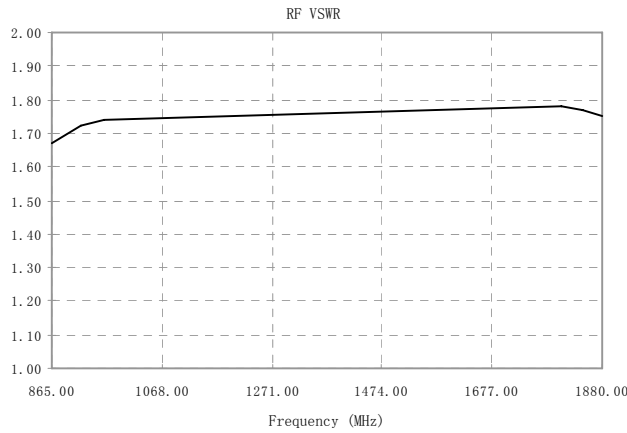
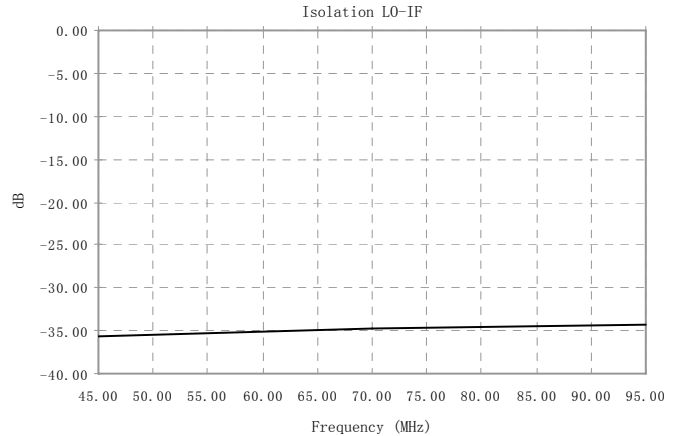
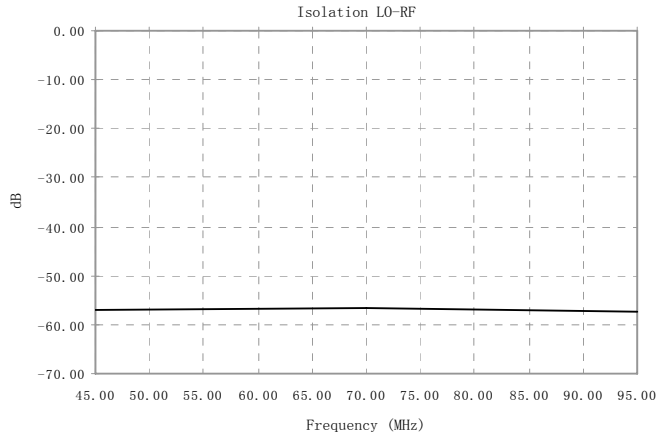
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ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not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

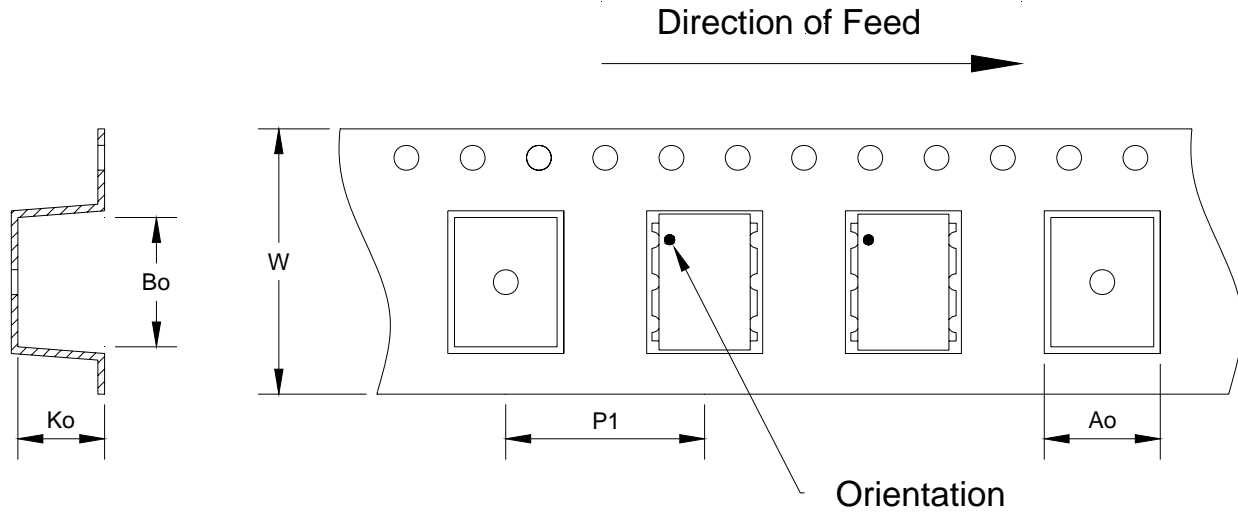
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Typical Performance Curves



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-008782-ES0118	Tape and Reel 900 pieces