

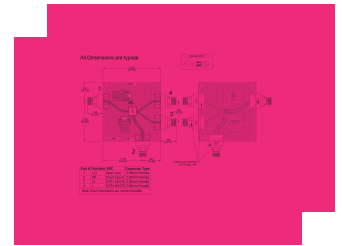
EVB-MMIQA-0218H

Integrated Drive GaAs MMIC IQ Mixer

DEVICE OVERVIEW

General Description

The EVB-MMIQA-0218H is a versatile, robust, and broadband IQ mixer with an integrated broadband LO driver amplifier. The EVB-MMIQA-0218H is ideal for IQ, single sideband, and image reject mixing applications with wide bandwidths and operation at mmWave frequencies. The integrated LO driver amplifier allows for operation with LO powers as low as +0dBm while retaining exceptional conversion loss and linearity.



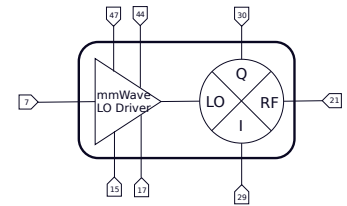
Features

RF/LO response: 2GHz - 18GHz
 IF response: DC – 3GHz
 I+Q Conversion Loss: 7.5 dB
 Image Rejection: 28dBc
 Minimum LO drive: +0dBm

Applications

- Single Sideband and Image Rejection Mixing
- IQ Modulation / Demodulation
- Vector Amplitude Modulation
- Band Shifting
- 5G Band Support

Functional Block Diagram



Part Ordering Options

Part Number	Description	Package	Green Status	Product Lifecycle	Export Classification
MMIQA-0218HPSM	Integrated Drive GaAs MMIC IQ Mixer	QFN	REACH RoHS	Released	EAR99
EVB-MMIQA-0218H	Integrated Drive GaAs MMIC IQ Mixer	EVB	RoHS REACH	Released	EAR99

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Revision History

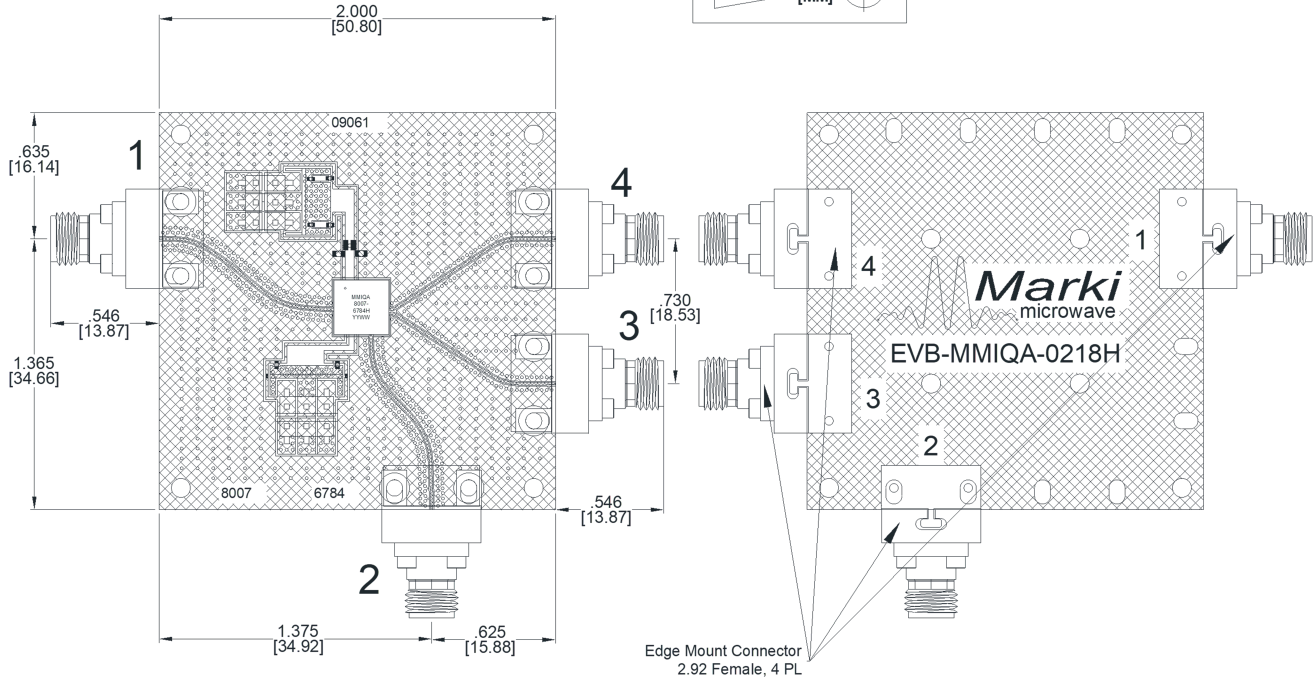
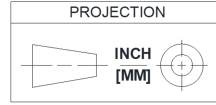
Revision Code	Revision Date	Comment
-	2023-12-15	Datasheet Initial Release
A	2025-07-02	Outline Update

Mechanical Data

Outline Drawing

Download : [Outline 2D Drawing](#)

All Dimensions are typical.



Port #	Function	VDC	Connector Type
1	LO	Open Line	2.92mm Female
2	RF	Short Circuit	2.92mm Female
3	Q	0.671 ±0.010	2.92mm Female
4	I	0.674 ±0.010	2.92mm Female

Note: Eval Connectors are not removable.

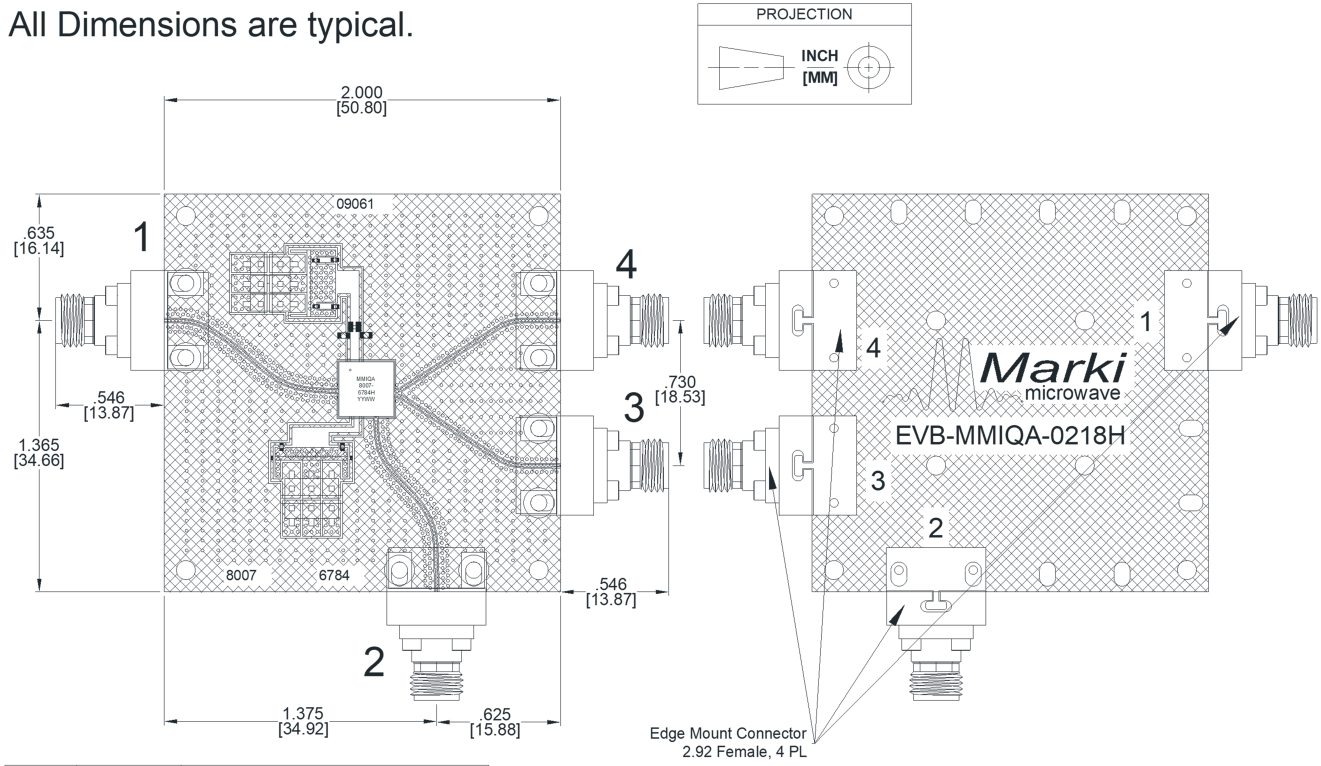
Evaluation Board

Evaluation Board Bill of Materials Table

Description	Manufacturer	Qty
0201 Resistor 82.5 OHM 1/20W	Various	1
0201 Resistor 270 OHM 1/20W	Various	1
0402 Resistor 10 OHM 1/16W	Various	2
0805 Capacitor 10uF 6.3V	Various	2
0402 Capacitor 4.7uF 50V	Various	4
0402, Inductor, 420 nH 5%	Various	1
Connector, Edge Mount, 2.92 F,	Southwest	4
PN : MMIQA-0218HPSM (Integrated Drive GaAs MMIC IQ Mixer)	Marki Microwave	1

Evaluation Board - Outline Drawing

All Dimensions are typical.



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