

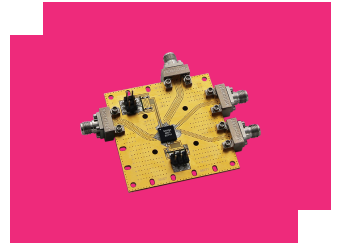
EVB-MMIQA-1040H

Integrated Drive GaAs MMIC IQ Mixer

DEVICE OVERVIEW

General Description

The EVB-MMIQA-1040H is a versatile, robust, and broadband IQ mixer with an integrated broadband LO driver amplifier. The EVB-MMIQA-1040H 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.



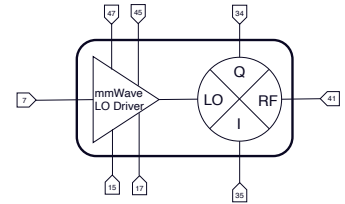
Features

RF/LO response: 10GHz - 40GHz
 IF response: DC – 10GHz
 I+Q Conversion Loss: 9 dB
 Image Rejection: 29dBc
 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-1040HPSM	Integrated Drive GaAs MMIC IQ Mixer	QFN	REACH RoHS	Released	EAR99
EVB-MMIQA-1040H	Integrated Drive GaAs MMIC IQ Mixer	EVB	RoHS REACH	Released	EAR99

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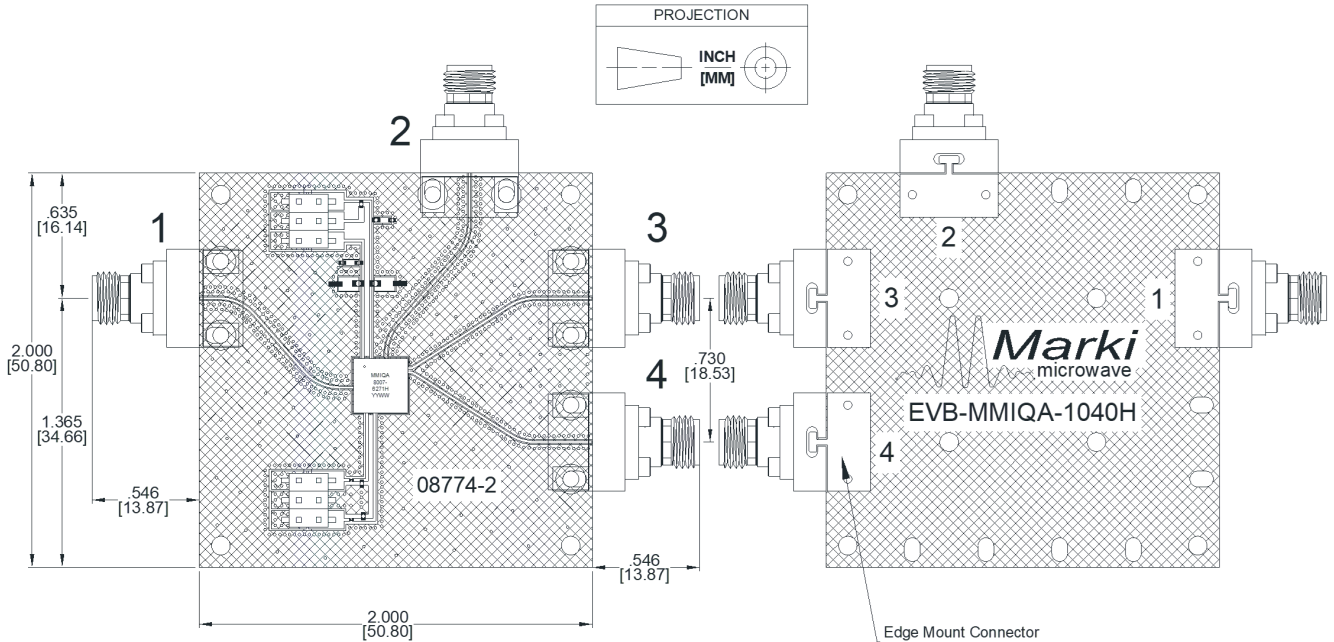
Revision History

Revision Code	Revision Date	Comment
-	2023-11-29	Datasheet Initial Release
A	2024-09-30	Updated as per ECN 24100

Mechanical Data

Outline Drawing

Download : [Outline 2D Drawing](#)

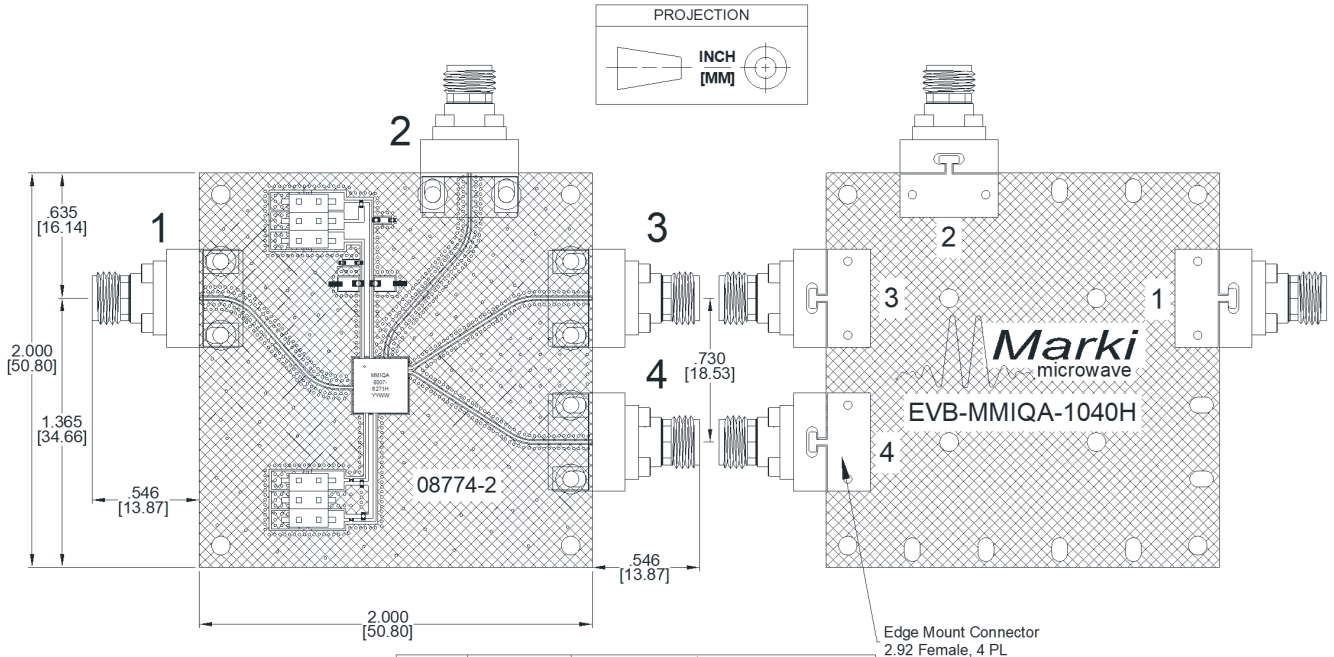


Port #	Function	VDC	Connector Type
1	LO	Open Line	2.92mm Female
2	RF	Short Circuit	2.92mm Female
3	I	0.674	2.92mm Female
4	Q	0.674	2.92mm Female

Note: Eval Connectors are not removeable.

Edge Mount Connector
2.92 Female, 4 PL

Evaluation Board - Outline Drawing



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