

Part No:

# HMQ3833



## Advanced Microwave K-Band IQ Mixer IQ Modulator/Demodulator SMA Female, 18 GHz to 32 GHz

### Mixer Specifications

- Frequency Range RF/LO 18 - 32 GHz
- Frequency Range IQ DC - 3 GHz
- Conversion Loss 9 dB Typ., 12 dB max.
- L/R Isolation 32 dB Typ., 27 dB min.
- L/I Isolation 26 dB Typ., 20 dB min.
- LO Drive Level +15 to +19 dBm
- Image Reject 32 dB Typ., 25 dB min
- Amplitude Balance ±0.9 dBm max
- Phase Balance 5° Typ.
- Input P1 Level +6 dBm min.
- Max. Input Level +24 dBm
- Operating Temperature -40° to +85°C
- Storage Temperature -54° to +125°C
- ESD Sensitive Handle only in ESD Workstation

#### NOTES:

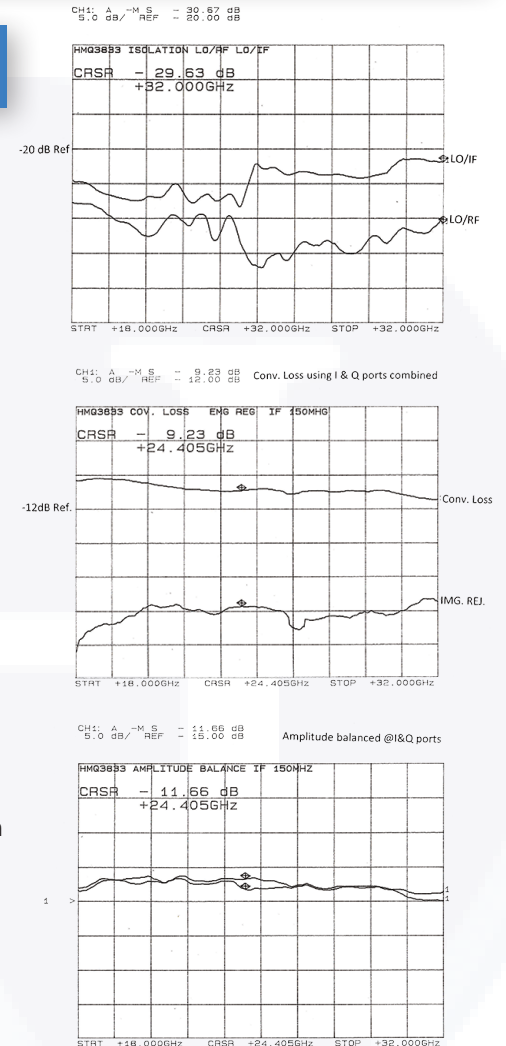
1. I & Q INPUT (or Output) ports are 90° out of phase
2. *Data shown here is actual plotted data.  
It is not computer generated.*

The Advanced Microwave HMQ3833 covers 18 to 32 GHz I/Q mixer with IF frequency range of DC to 3 GHz. The mixer can be used as a single side band upconverter or image reject mixer or up or downconversion. The LO is driven with +15 to +19 dBm typ and as an up or downconverter features conversion loss of 9 dB typ, L to I isolation of 26 dB typ, L to R isolation of 32 dB typ. Image Rejection is typically 32 dB while amplitude balance is typically ±0.9 dBm max across the band.

The HMQ3833 is RoHS compliant.

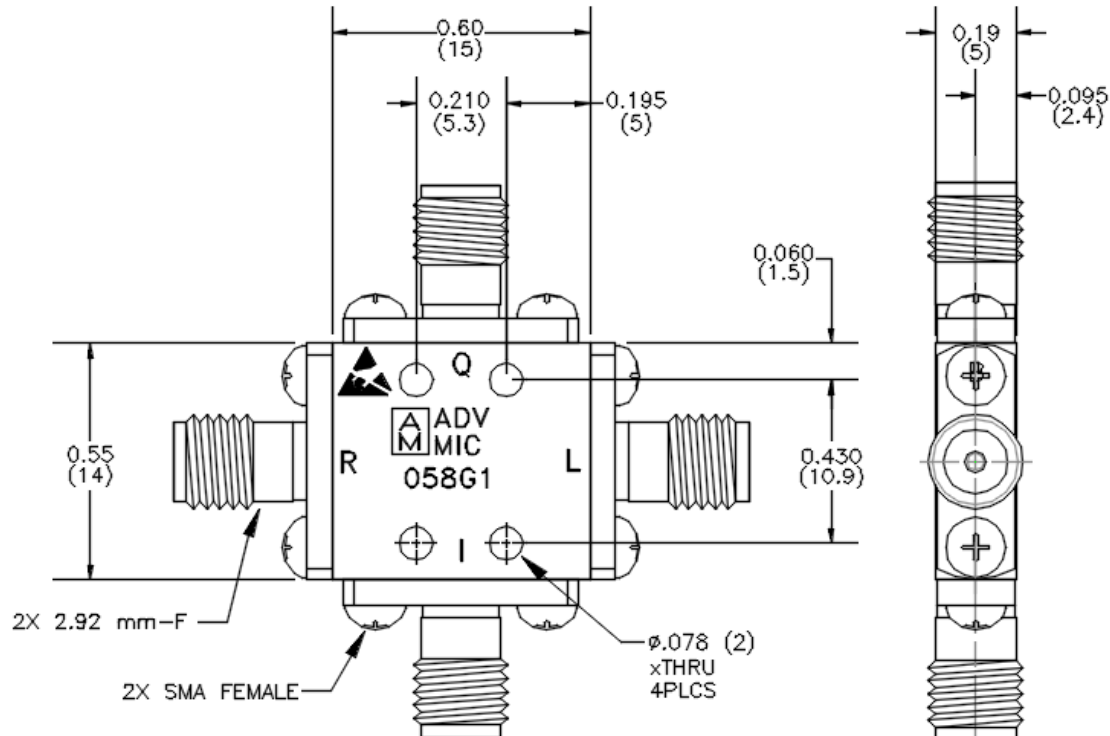


In-phase quadrature (I/Q) mixers and image reject mixers (IRM) offer a robust frequency mixing solution for applications that require high image rejection or sideband suppression. These mixers can be used as an upconverter or downconverter. I/Q or IRM mixers use two double-balanced mixers with a 90° hybrid. The inherent architecture of I/Q mixers eliminates the resulting product due to image frequency during downconversion and allows the selection of desired sideband during upconversion.




To view online, go to: <https://www.hasco-inc.com/mixers/k-band-iq-mixer-iq-modulator-demodulator-sma-female-18-ghz-to-32-ghz-with-if-range-of-dc-to-3-ghz-lo-power-15dbm-to-19dbm/>

# HMQ3833 | 18 - 32 GHz | Outline Drawing



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