Part No:

HMQ3531





The Advanced Microwave HMQ3531 is an 8 to 18 GHz I/Q mixer with an IF frequency range of DC to 1 GHz. The mixer can be used as a single side band upconverter or image reject mixer downconverter. The LO is driven with +10 to +16 dBm typ and as an up or downconverter features conversion loss of 7dB typ, L to I isolation of 30 dB typ, L to R isolation of 35 dB typ. Image Rejection is 24 dB while amplitude balance is typically 0.6 dB across the band.

The HMQ3531 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 downcoverter. 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.

Advanced Microwave I/Q Mixer I/Q Modulator SMA Female From 8 GHz to 18 GHz

Mixer Specifications

• Frequency Range RF/LO 8 - 18 GHz

Frequency Range IF DC - 1 GHz

• Conversion Loss 7.0 dB Typ., 9 dB max.

• L/I Isolation 30 dB Typ., 25 dB min.

• L/R Isolation 35 dB Typ., 28 dB min.

• LO Drive Level +10 to +16 dBm

• Image Reject 24 dB Typ., 18 dB min

• Amplitude Balance ± 0.6 Typ., ± 1.0 dB max

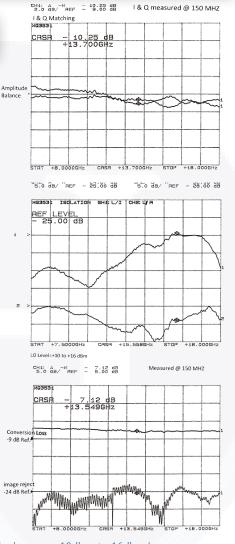
• Operating Temperature -40° to +85°C

Storage Temperature -54° to +125°C

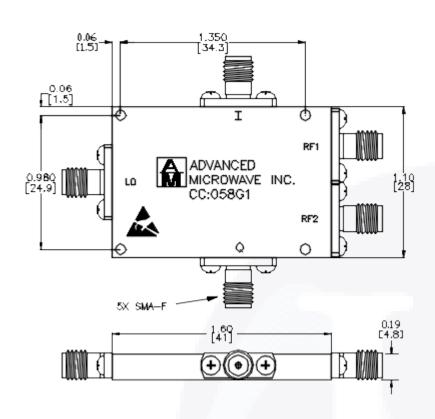
• ESD Sensitive Handle only in ESD Workstation

NOTES:

- 1. I & Q INPUT (or Output) ports are 90° out of phase
- 2. Terminate unused RF port with 50 Ω termination
- 3. Data shown here is actual plotted data. It is not computer generated.



To view online, go to: https://www.hasco-inc.com/mixers/iq-mixer-iq-modulator-sma-female-8-ghz-to-18-ghz-with-if-range-of-dc-to-1-ghz-lo-power-10dbm-to-16dbm/



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Product specifications subject to change without notification.