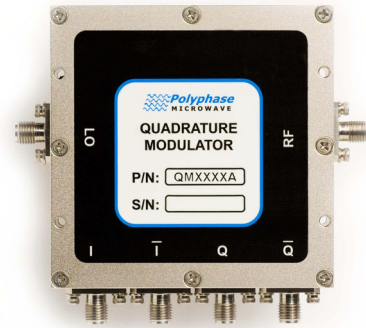


FEATURES

LO/Rf Frequency:	3000 – 4000 MHz
Input IP3:	+17 dBm
Input P1dB:	+7 dBm
Noise Floor:	-173 dBm/Hz
Sideband Suppression:	-38 dBc
LO Leakage:	-40 dBm
LO Power:	+15 dBm

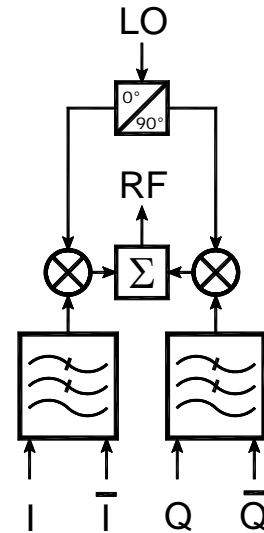


DESCRIPTION

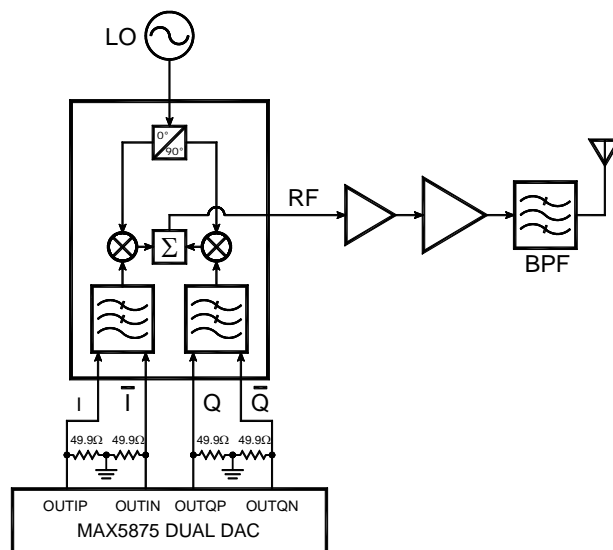
The QM3040A is a quadrature (I/Q) modulator optimized for direct modulation of an RF carrier. Differential I and Q inputs are mixed with the local oscillator (LO) to produce a modulated RF output.

Internally matched lowpass filters provide anti-alias functionality for removing Nyquist images and wideband noise when interfacing to high-speed D/A converters.

For more information on interfacing the QM3040A to high-speed D/A converters and single-ended sources, please see Application Note 101A, "Driving the QM Series Quadrature Modulators."



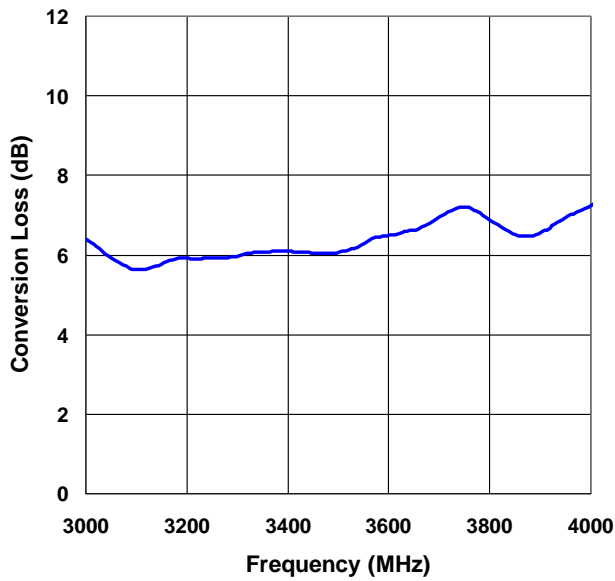
TYPICAL APPLICATION: DIRECT CONVERSION TRANSMITTER



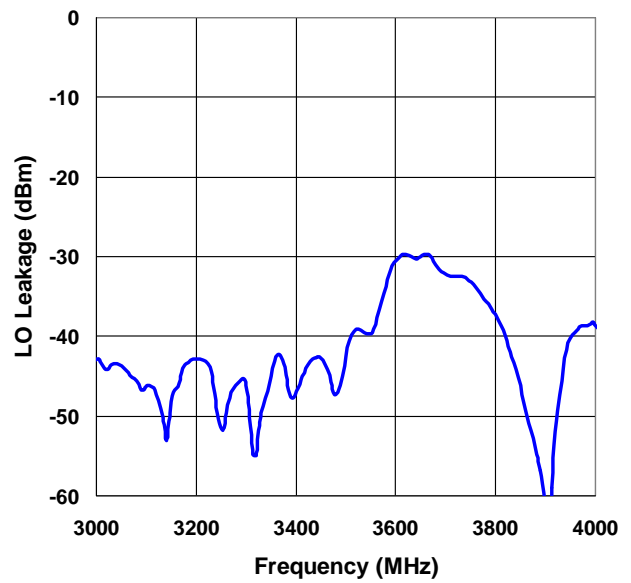
TYPICAL PERFORMANCE CHARACTERISTICS

Standard Test Conditions: +25°C, LO = +15 dBm, I/Q inputs = 0 dBm total @ 100 kHz.

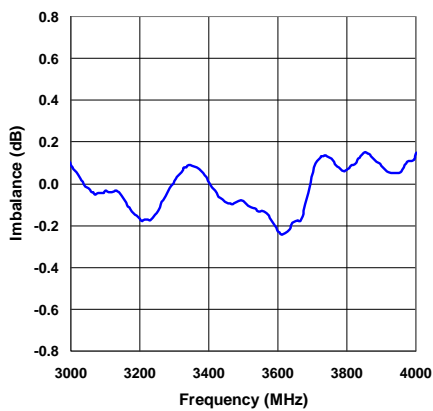
Conversion Loss



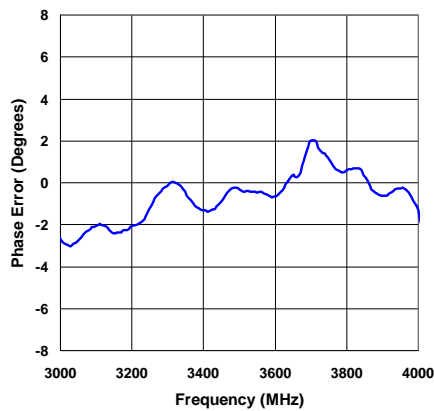
LO Leakage at RF Port



Amplitude Imbalance



Quadrature Phase Error



Sideband Suppression

