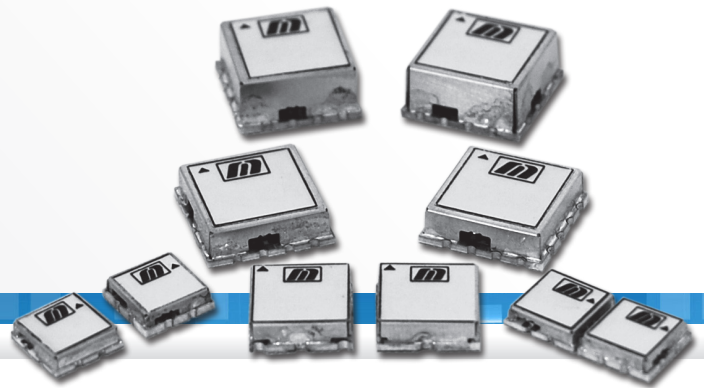


MICA Series

Voltage Controlled Oscillators (VCO)

100 MHz to 7 GHz



Mercury Systems offers an extensive selection of MICA voltage controlled and ceramic resonator oscillators (VCO/CRO) for select frequency bands from 100 MHz to 7+ GHz. Circuit designs are 50 ohm hybrid modules and include a variety of packages and styles. Multiple resonator technologies, coaxial, microstrip, air coil, deliver fixed, narrowband, and wideband performance. Typical output power levels are available from 0 dBm to +10 dBm. Buffer amplifier integration is offered for higher output power devices. Supply voltages range from +3 to +15 Vdc with linear tuning voltages up to +20 Vdc. All designs utilize discrete components with tuning capability for consistent and reliable performance.

A Variety of Package Styles and Options

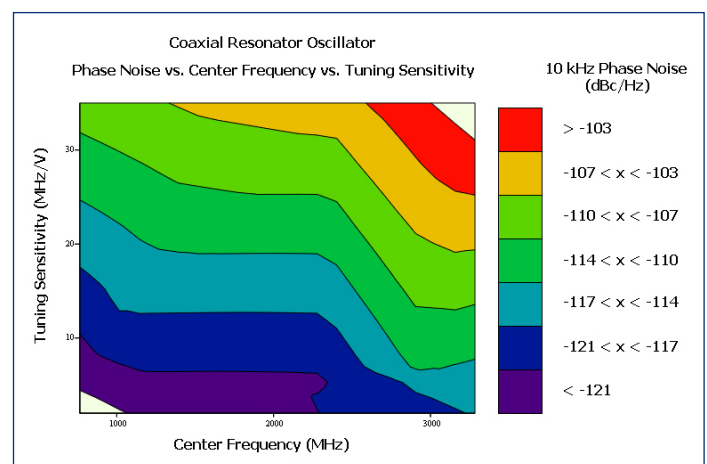
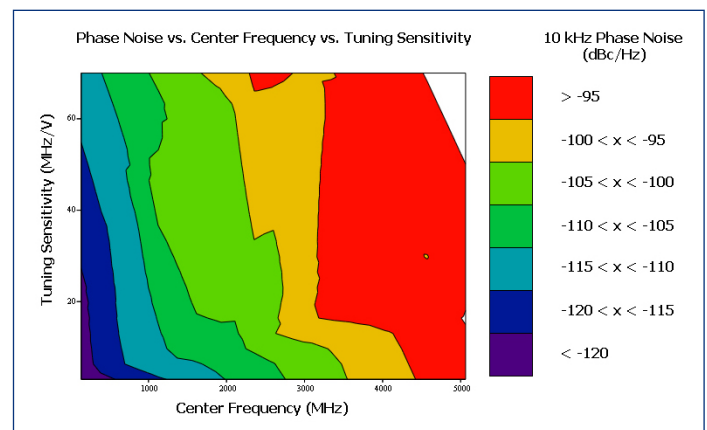
Our MW300/375/500 VCO are commercial grade (SN62 solder) microstrip/PWB construction with plastic packaged silicon RF transistors and varactor components. The smallest footprint is the MW300 series in a 0.3" x 0.3" SMT package, which does not sacrifice performance for size. Full RoHS options are similarly available with gold (ENIG) PWB plating and SN96 solder component attachment. Our MW375/MW500-6000 product series is ideally suitable for high temperature VCO applications. These models incorporate the same high performance while supporting a wider temperature range (up to -55°C to +110°C).

Military & Space Program Support

For rugged, high-reliability military and space applications, our MW625 series are offered within hermetically sealed kovar pin packages. The pins can be gull-winged for direct surface mounting onto a PWB. For



highest reliability space applications, Mercury offers thin-film hybrid (chip and wire) VCO designs in TO-8/SMT0-8 metal ceramic packages, with full program management support to MIL-PRF-38534, NASA EEE-INST-002, and ESA screening profiles.



Design Capability

Our extensive design, prototype, test and manufacturing resources expediently deliver finely-tuned application specific solutions, that leverage our broad product solution suite.



*Visit our website at <http://rf.mrcy.com>
for more information regarding our
proven VCO designs or to connect
with our technical team for detailed
engineering support.*

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2961.00E-0513-TB-VCO-Series



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