



**GREENRAY INDUSTRIES, INC.**

*PRECISION QUARTZ TECHNOLOGY*

FOR IMMEDIATE RELEASE

**ZYH1002/1003 MINIATURE REFERENCE OSCILLATOR PROVIDES VERY LOW POWER OPTION FOR POWER SENSITIVE & BATTERY POWERED APPS**

**Q2, 2009** – Mechanicsburg, PA – Greenray Industries' ZYH1002/1003 Series miniature reference oscillators offer a new low power option designed specifically for use in applications that require low power consumption and/or battery power.

The ZYH 1002/1003 Series OCXO uses a thermally efficient oven design to lower power requirements - as compared with similar sized devices of conventional construction - drawing only slightly more power than a TCXO. Typical power requirement is only 195mW at +25°C with a slope of -3.4mW/°C.

The ZYH1002/1003 Series utilizes a standard 4-pin dual-inline package for direct replacement and upgrade of existing sources. Standard frequencies are 10MHz and 20MHz, but any frequency from 10 to 50MHz is available. Frequency stability is  $\pm 0.1$ ppm over -20° to +70° or  $\pm 0.3$ ppm over -40° to +85°C. Typical short term stability (Allan Deviation) is less than  $5 \times 10^{-11}$  for times from 0.1 to 1 second. ZYH1002 output is CMOS compatible with 50/50  $\pm 5\%$  duty cycle. The ZYH1003 provides clipped sinewave output of 1Vp-p into a 10k ohm load.

Standard input supply voltage is +5Vdc with optional +3.3Vdc available. Electronic frequency control is provided for precise tuning or phase locking applications. Various specification modifications and alternate packages may be available.

Greenray Industries, a market leader in precision, high reliability TCXOs, designs and manufactures high precision, quartz-based oscillators for use in wireless, wired telephony, aerospace, military, satellite, GPS and other communications applications. Information regarding the ZYH1002/1003 Series OCXO is available at [www.greenrayindustries.com](http://www.greenrayindustries.com) or via email at [sales@greenrayindustries.com](mailto:sales@greenrayindustries.com).

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