

Technology Announcement:

Micro Oscillator, Inc. IPS GaAs FET

Gallium Arsenide R, L, & C Proximity Sensors Extreme Radiation & Military Temperatures Utilizing only 2 Transistors and 1 Diode

The circuit is radiation hardened by design, utilizing GaAs FET transistors. This is a unique new approach for proximity sensors that can be built using Bipolar, FET, or MOS style transistors from almost all semiconductor process technologies Si, GaAs, GaN, SiC or even using vacuum tubes. This allows the most rugged transistor types to be used. Additional ruggedness is assured by the patented technique that relies on passive component (R,C,L) ratios instead of tight transistor parameters or matching. Transistor gain variations and DC leakage currents have minimal effect, **while the operating voltage is in the 2 to 3 volt range.**

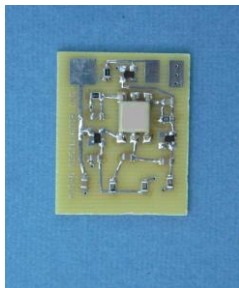
The circuit implementation is also designed for input sensing flexibility. One or more inductors can be utilized in the circuit and can be tuned to respond between various metals such as ferrous and non-ferrous metals, or tuned to a specific metal. Capacitive and resistive sensing versions also available.

GaAs FET technology demonstration boards are available now.

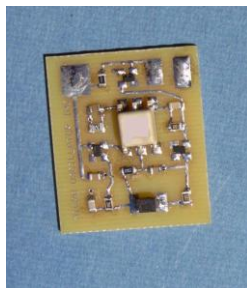
ADVANTAGES:

1. Technology and transistor style independent (Si, GaAs, GaN, or SiC as Bipolar, JFET, or MOS).
2. Transistor gain and offset are not critical.
3. Extreme radiation and military temperature capable.
4. Input sensing flexibility.
5. Low operating voltage, 2-3 volts.

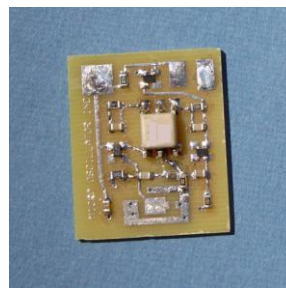
U.S. Patent 7,456,700 "Variable loop gain oscillator system"



Resistive Sensor



Inductive Sensor



Capacitive Sensor

For more information about this product *send an email to sales@micro-oscillator.com, or telephone a Micro Oscillator Sales Representative @ 512-470-2835.*