Technology Announcement:

Micro Oscillator, Inc. IPS JFET-L1

Inductive Proximity Sensor Addresses High Radiation & Temperatures.

The circuit is radiation hardened by design, utilizing JFET transistors. This is a unique new approach for proximity sensors that can be built using Bipolar, JFET, or MOS style transistors from almost all semiconductor process technologies Si, GaN, SiC or even using vacuum tubes. This allows the most rugged transistors 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.

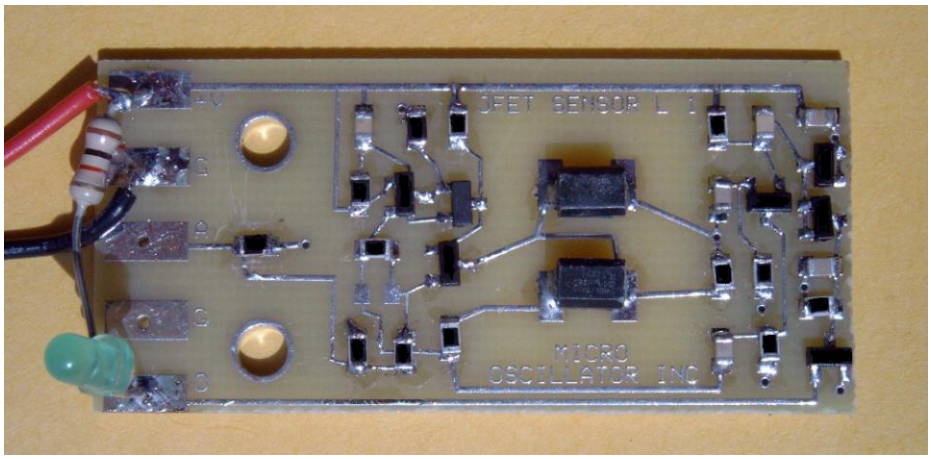
The circuit implementation is also designed for input sensing flexibility. One or more inductors can be utilized in the circuit. The inductors can be tuned to respond between various metals such as ferrous and non-ferrous metals, or tuned to a specific metal.

Si JFET technology demonstration boards are available now.

ADVANTAGES:

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

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



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