



Communications & Power Industries

communications & medical products division  
microwave operation

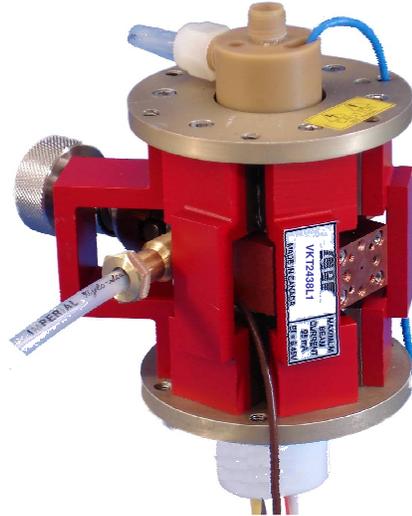
# HIGH POWER MMW OSCILLATOR WITH MANUAL TUNING, 120 - 140 GHz MODEL SERIES VKT 2438L

## DESCRIPTION

The VKT 2438L series of manually tuned CW Extended Interaction Oscillators (EIOs) are targeted for F-Band radar and scientific instrumentation applications.

This EIO delivers output power in excess of 10 W over a 3 GHz tuning range and has a typical electronic tuning range of 200 MHz.

The VKT 2438L series of EIOs can be integrated with the VPW2827 series of power supply to provide a highly stable and low noise source.



## TYPICAL ELECTRICAL PERFORMANCE

- Center Frequency: 140 GHz
- CW Output Power: 12 W
- Mech. Tuning Range:  $\pm 1.5$  GHz
- Electronic Tuning: (-3dB) 200 MHz
- Cathode Voltage: 9.8 kV
- Cathode Current: 100 mA
- Anode Voltage: 6.1 kV

## TUNING OPTIONS

- Fixed Frequency, Trimable or Tunable
- Motorized Tuning  
12V, 0.26 Amp DC electrical motor tuner position indicated by 10 KOhm and 10 turn potentiometer.

## MECHANICAL

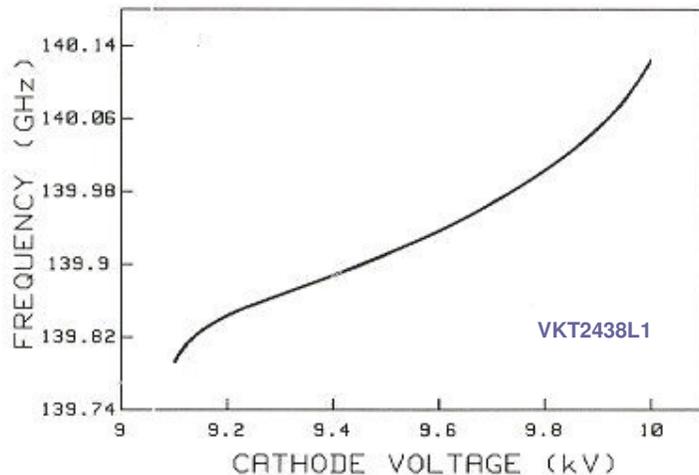
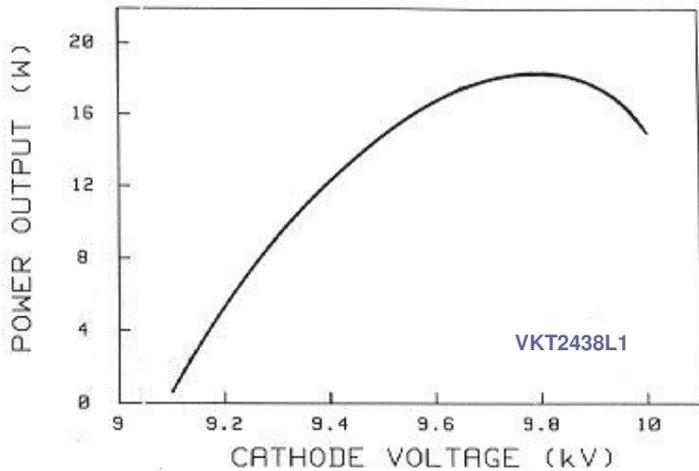
- Waveguide: WR-8 (2.032 x 1.02 mm)
- Flange: Mates with UG 387/U Mod
- Elec. Connections: Flying Leads
- Weight: 4.0 Kg typ.
- Cooling: Liquid, Flow Rate 1.5 l/minute min.  
Input Water Temperature 30.0 °C max.

## TYPICAL ENVIRONMENT

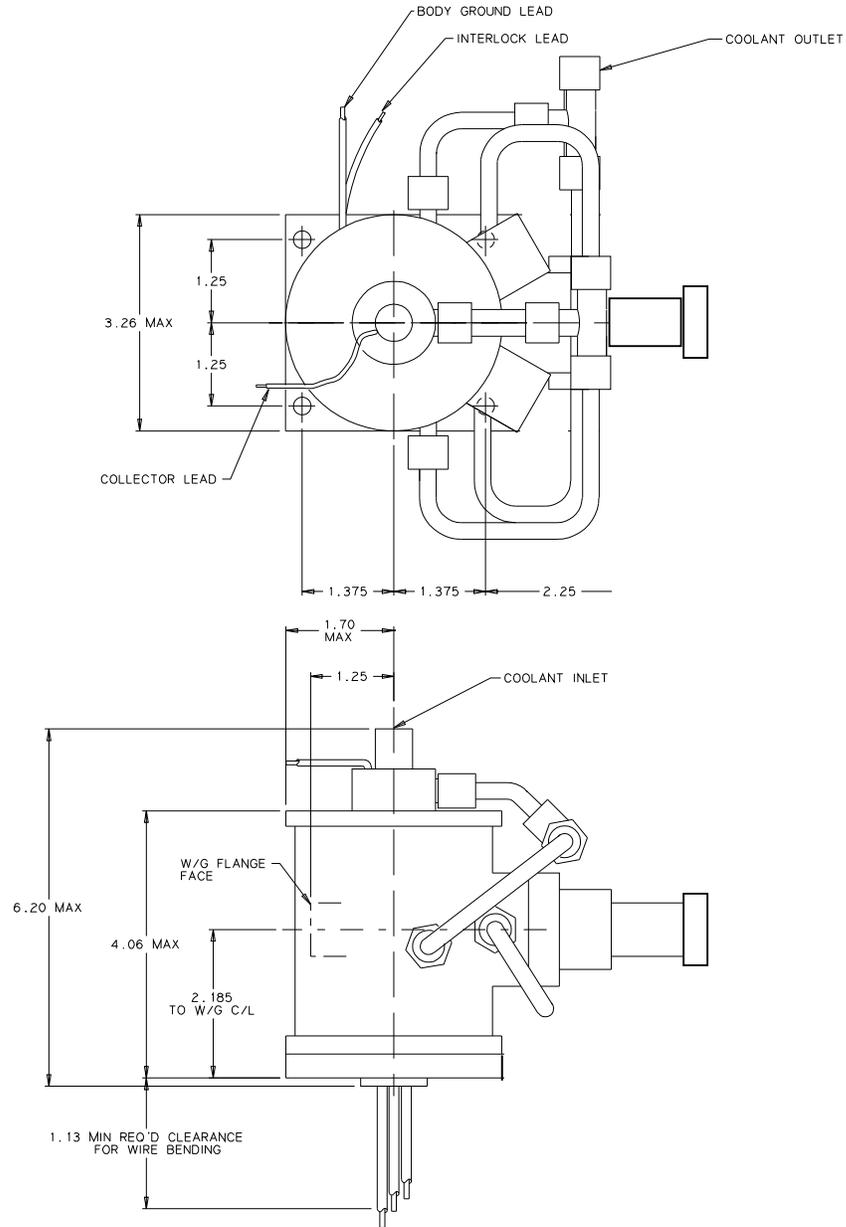
- Laboratory/Wheeled Vehicle
- Temperature Range:
  - Operating: 0 to +60 °C
  - Non-Operating: -37 to +85 °C
- Altitude:
  - Operating: up to 1,500 m
  - Non-operating: up to 12,000 m

## NOTES:

1. Characteristic values are based on performance tests. These values may change without notice.
2. Please consult your local CPI sales office or CPI Canada for more information.



## OUTLINE DRAWING for reference only



For further information please contact CPI Canada, a field office or local representative they may be found on our web site at:

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