



communications & medical products division  
microwave operation

# HIGH POWER MOTOR TUNED MMW OSCILLATOR

## 70 GHz 20 Watts CW

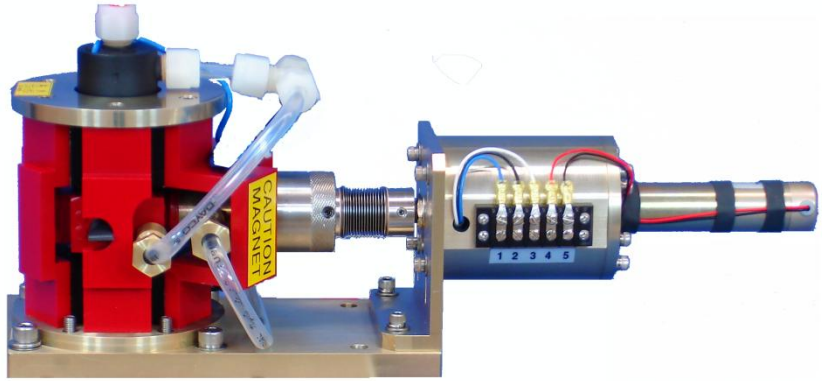
### MODEL SERIES VKE 2401P4

#### DESCRIPTION

The VKE 2401P4, dc motor tuned CW Extended Interaction Oscillator (EIO) is targeted for scientific instrumentation applications.

Each EIO delivers output power in excess of 20W over 1 GHz and 15 W over 2 GHz tuning range with a typical electronic tuning range of 200 MHz.

The VKE 2401P 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	70 GHz
CW Output Power	25 W
Mech. Tuning Range	2.0 GHz
Electronic Tuning(-3dB)	150 MHz
Cathode Voltage	-6.5 kV
Cathode Current	100 mA
Anode Voltage	+2.5 kV

#### OPTIONS

Fixed Frequency, Trim tuned, Manually Tuned or Motor Tuned.  
12V, 0.26 Amp DC electrical motor tuner position indicated by 10 KOhm and 10 turn potentiometer

#### MECHANICAL

Waveguide: WR-15 (3.76 x 1.88 mm)  
Flange: Mates with UG 387/U  
Elec. Connections: Flying Leads  
Weight: 4.5 Kg.  
Cooling: Liquid, Flow Rate 1.5 L/minute min.  
Input Water Temperature 30.0 °C max

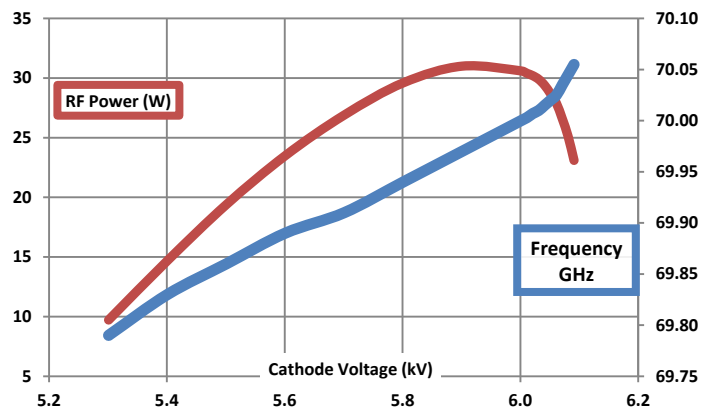
#### TYPICAL ENVIRONMENT

Laboratory/Wheeled Vehicle  
Temperature Range:  
Operating: -5 to +60°C  
Non-Operating: -20 to +80°C  
Altitude:  
Operating: up to 1,500 metres  
Non-operating: up to 12,000 metres

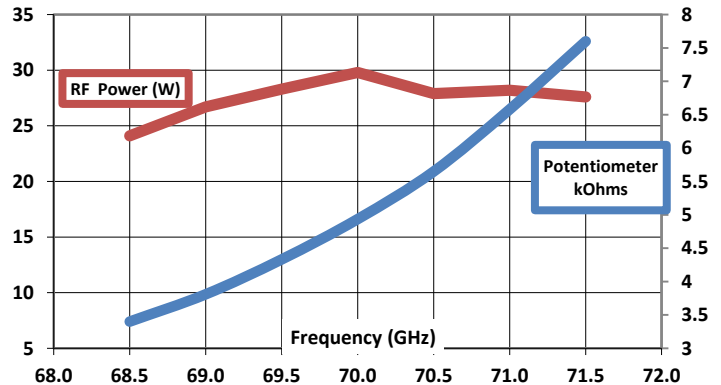
#### NOTES:

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.

RF POWER , FREQUENCY vs CATHODE VOLTAGE



RF OUTPUT POWER, POTENTIOMETER VALUE vs FREQUENCY

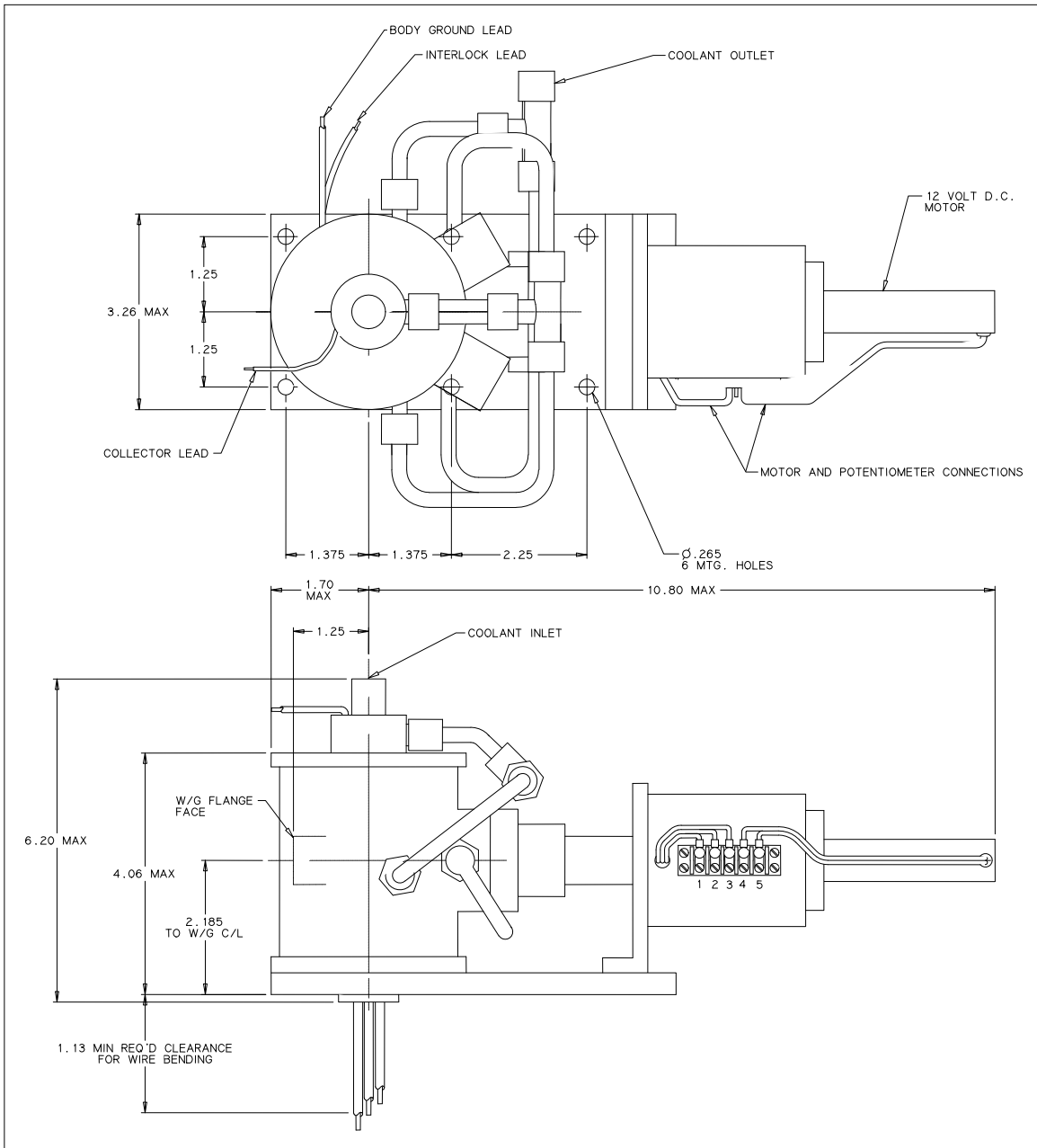




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## OUTLINE DRAWING for reference only



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

[www.cpii.com](http://www.cpii.com)

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