

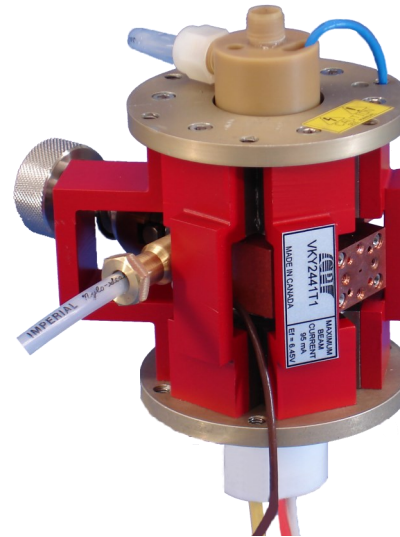
HIGH POWER mmW OSCILLATOR

170-220 GHz 10 Watt CW Oscillator

Model VKY2441 is a water-cooled continuous wave (CW) Extended Interaction Klystron Oscillator (EIO) used for instrumentation and scientific applications.

Frequencies are available from 170 GHz to 220 GHz producing up to 10 Watts of CW power with a -3 dB electronic tuning range of 120 MHz. This high power vacuum electron device (VED) is remarkably compact, has long life and stable output.

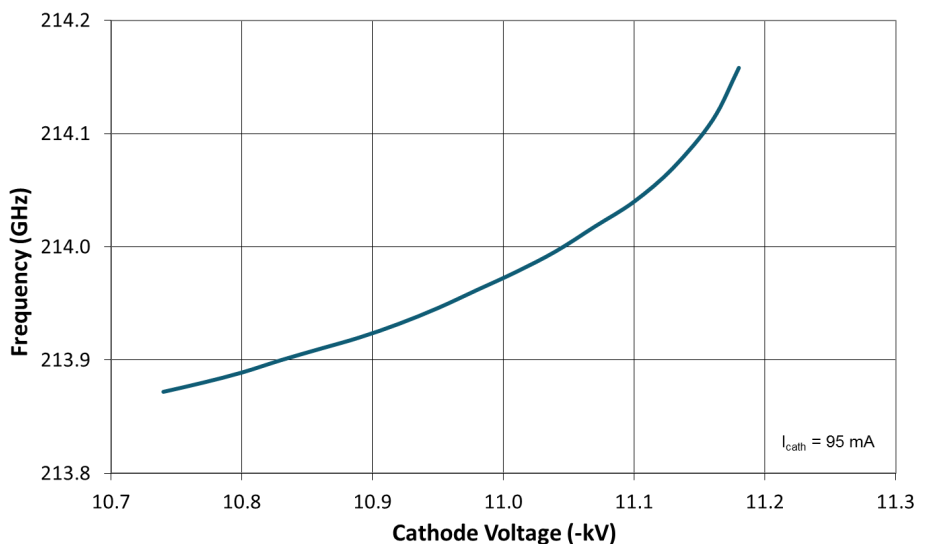
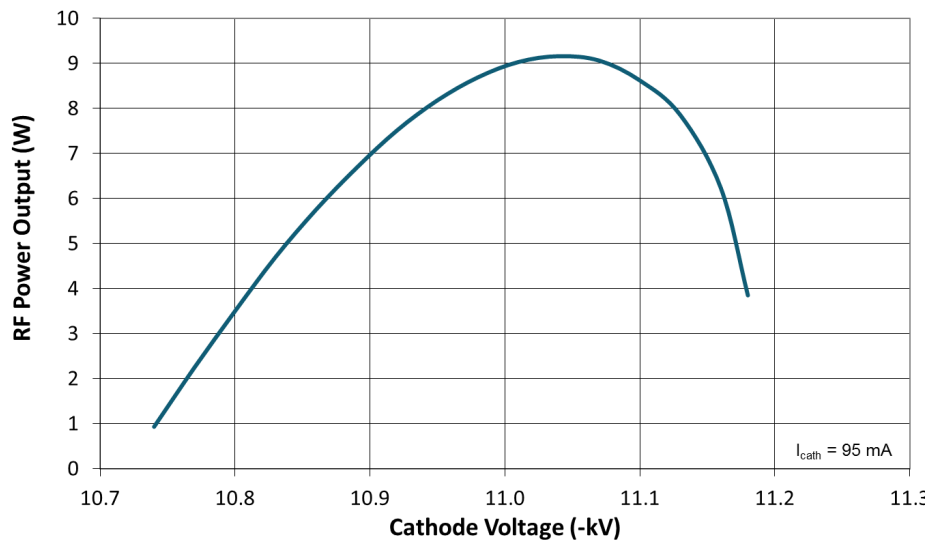
The VKY2441 series of EIOs may be integrated with the CPI VPW2827 series power supply and VJB2002 series heat exchanger resulting in a compact self-contained and highly reliable transmitter subsystem.

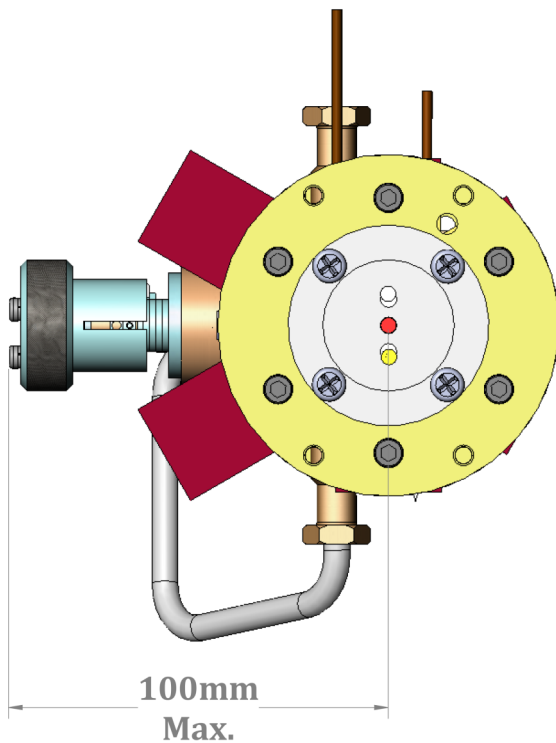
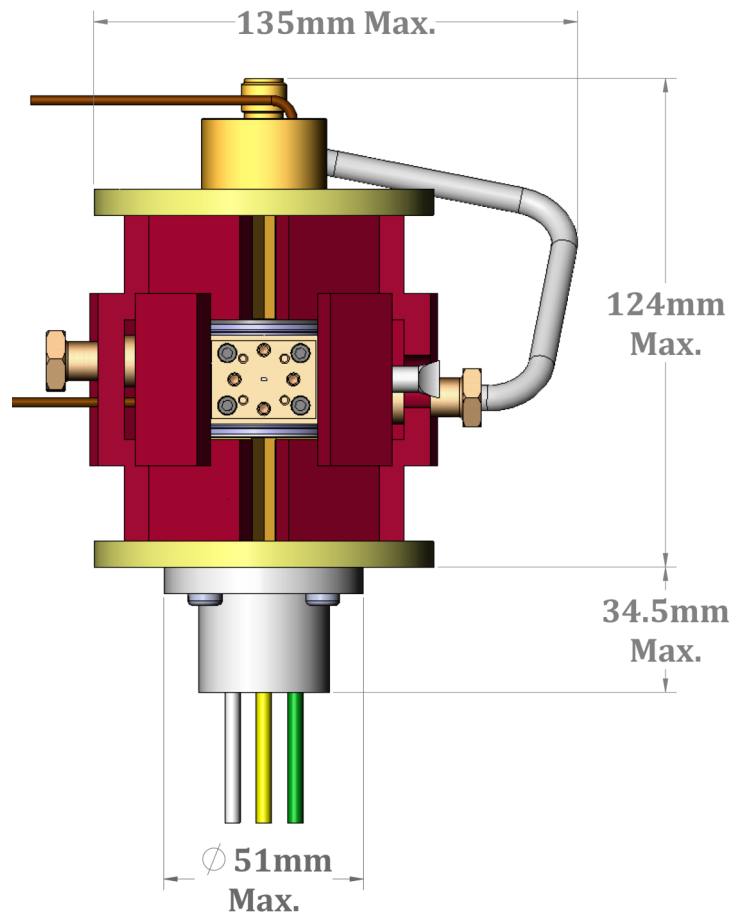
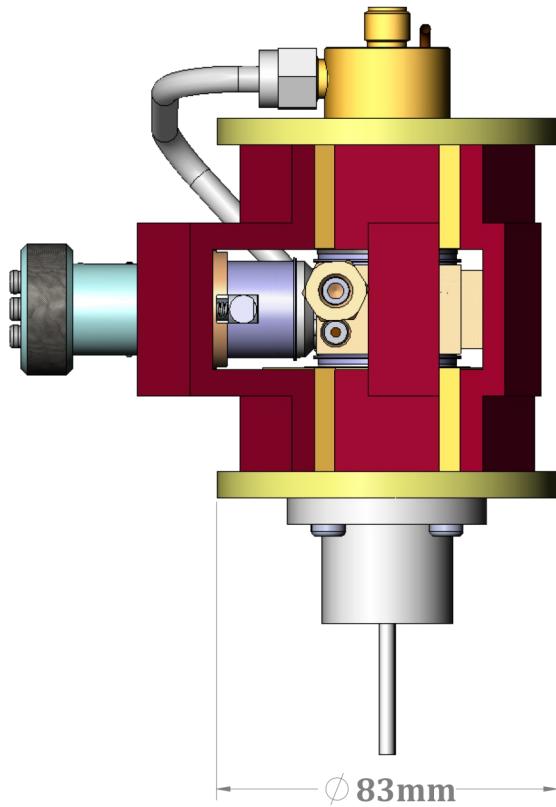


Model VKY2441

Features	
Center Frequency Range	170 to 220 GHz
Power Output (CW)	10 W
Tuning Range Mechanical	4,000 MHz
Cathode Voltage	-11 kV
Cathode Current	95 mA
Anode Voltage	5 kV
Temperature Operating	+5 to +30 °C
Temperature Non-operating	-40 to +60 °C
Humidity	95% relative non-condensing
Altitude	3,000 m

Cooling	
Type	Deionized Water
Temperature Coolant	+5 to +30 °C
Flow Rate	2 l/min
Pressure Drop	200 kPa max.





Mechanical

Waveguides	WR-5
Flanges	UG-387/U-M MIL-F-3922/67B-M05
Power Supply Connections	Color Coded Flying Leads 450 mm Max. Length
Weight	4.0 kg Max.

Options

Fixed Center Frequency in the range of 170-220 GHz
Electric Motor Tuning of ± 1 GHz
Power Supply, DC or AC Prime Power
Temperature Controlled, De-ionized and Filtered Water Heat Exchanger