

# VKP-8291A Klystron

CPI Microwave Power Products (MPP) offers klystrons for particle accelerator applications. The VKP-8291A is an 805 MHz, 550 kW peak, 50 kW average long-pulse klystron for the US Department of Energy Spallation Neutron Source Project

## Key Features

- Cathode-pulsed Electron gun
- 6-cavity rf circuit, including one 2<sup>nd</sup> harmonic cavity for enhanced efficiency
- Single output window
- Collector capable of dissipating the entire beam power

## Typical Operating Parameters

Peak Power Output	560	kWatts
Average Output Power	50	kWatts
Peak Beam Voltage	75	kV
Peak Beam Current	11.2	A
Frequency	805	MHz
Duty	9%	---
RF Pulse width	1.50	msec
-1dB Bandwidth	± 2	MHz
Saturated Gain	51	dB
Efficiency	67%	---
Collector Coolant Flow	35 / 130	gpm / l/m
Body /Magnet Coolant Flow	5 / 20	gpm / l/m

### Electromagnet:

Gun Coil Current	16	A
Gun Coil Voltage	3	V
Main Coil Current	28	A
Main Coil Voltage	80	V

### Size with Accessories:

Height	105 / 267	inches / cm
Weight	500 / 1100	pounds / kg



For information on Super Power Klystrons and other CPI MPP products, visit our website at [www.cpii.com/mpp](http://www.cpii.com/mpp), or contact:

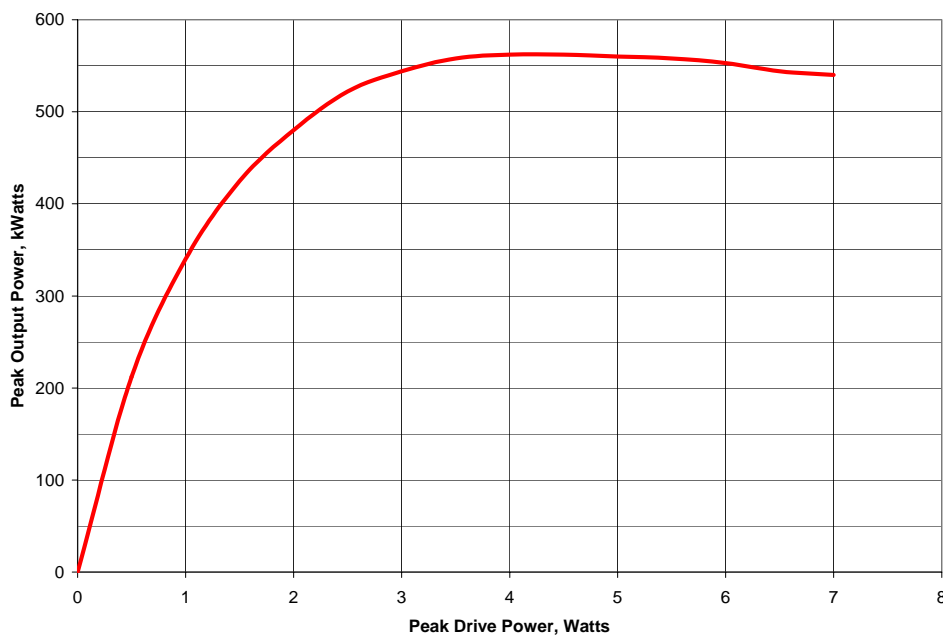
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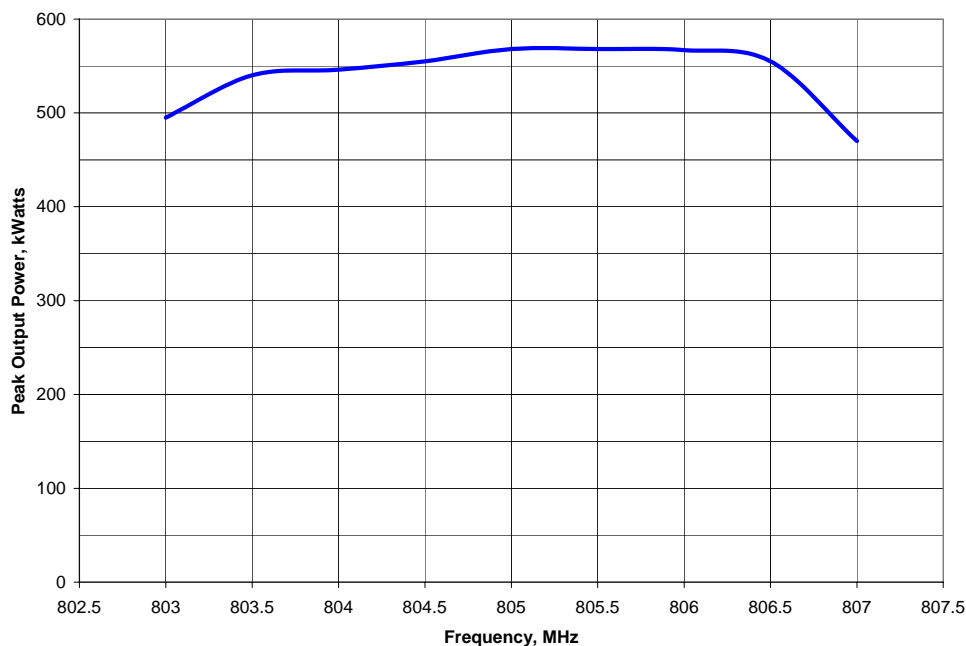
## Typical Operating Characteristics

Measured data from S/N 007

*Transfer Curve*



*Frequency Response*



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