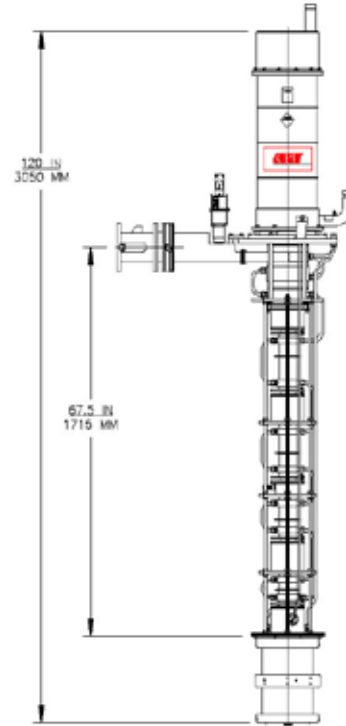


CPI/Microwave Power Products (MPP) offers super-power klystrons for particle accelerator applications. The VKP-8290A is a 805 MHz, 2.5 MW peak, 250 kW average long-pulse klystron built for a prototype concept of the Spallation Neutron Source Project at Los Alamos National Laboratory.

FEATURES

- Electron gun with modulating anode for beam control
- 6-cavity rf circuit, including one 2nd harmonic cavity for enhanced efficiency
- Single output window in WR-975 wave guide
- Collector capable of dissipating the entire beam power



TYPICAL OPERATING PARAMETERS

Peak Output Power	2,500	kWatts (min)
Average Output Power	250	kWatts
Peak Beam Voltage	120	kV (max)
Peak Beam Current	55	A (max)
Peak Mod Anode Voltage	100	kV
Frequency	805	MHz
Duty	10%	---
RF Pulse Width	1.67	msec
1 dB Bandwidth	±0.7	MHz (min)
Saturated Gain	45	dB (min)
Efficiency	55	% (min)
Collector Coolant Flow	120 / 450	gpm / l/m
Body Coolant Flow	10 / 2.3	gpm / m³/h
O/P Window Cooling (Air)	25 / 50	cfm / m³/h
Electromagnet:		
Gun Coil Current	18	Amps
Gun Coil Voltage	20	Volts
Main Coil Current	30	Amps
Main Coil Voltage	120	Volts
Size with Accessories:		
Height	120 / 3050	inches / cm
Weight	5,000 / 2,270	pounds / kg

The values listed above represent specified limits for the product and are subject to change. The data should be used for basic information only. Formal, controlled specifications may be obtained from CPI for use in equipment design.



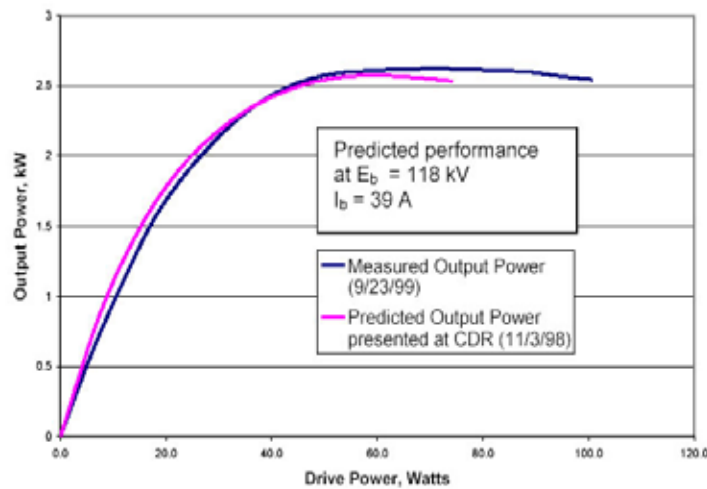
For information on this and other CPI products, visit our website at: www.cpii.com, or contact: CPI MPP Division, 607 Hansen Way, Palo Alto, CA 94303

TELEPHONE: 1(800) 414-8823. **FAX:** (650) 856-0705 | **EMAIL:** marketing@cpii.com

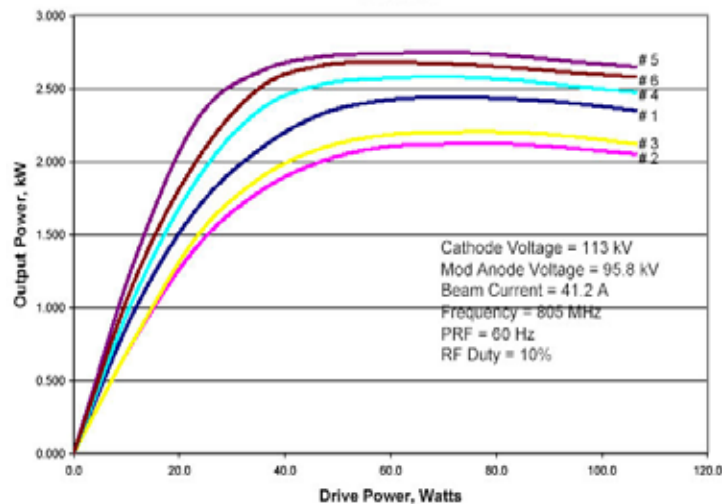
Measured Test Data

Peak Beam Voltage: 113 kV
Peak Beam Current: 41.5 A
Peak Mod Anode Voltage: 96 kV
Frequency: 805 MHz

VKP-8290A - Transfer Curve



VKP-8290A - Transfer Curves with 1.5:1 Mismatch at 6 Equally Spaced Positions



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