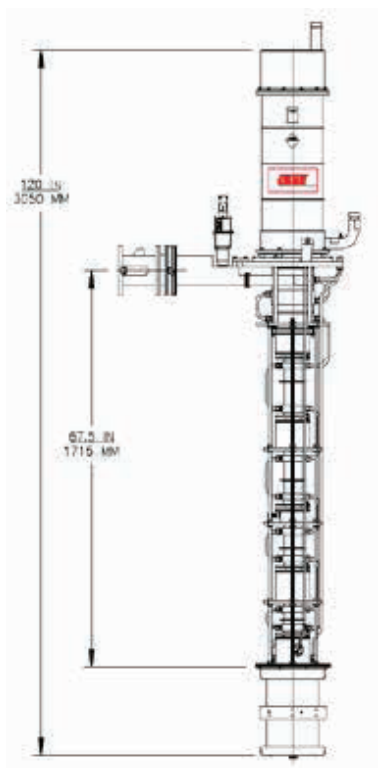


Communications & Power Industries Klystron



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.

Typical Operating Parameters

Minimum peak power output	2500 kW
Average output power	250 kW
Maximum peak beam voltage	120 kV
Maximum peak beam current	55 A
Peak mod anode voltage	100 kV
Frequency	805 MHz
Duty	10%
RF pulsewidth	1.67 mSec
Minimum 1 dB bandwidth	±0.7 MHz
Minimum saturated gain	45 dB
Minimum efficiency	55%
Collector coolant flow	120 gpm/450 l/m
Body coolant flow	10 gpm/2.3 m ³ /h
O/P Window cooling (air)	25 gpm/50 m ³ /h
Electromagnet	
Gun coil current	18 A
Gun coil voltage	20 V
Main coil current	30 A
Main coil voltage	120 V
Size with accessories	
Height	120 in/3050 cm
Weight	5000 lbs/2270 kg

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

BENEFITS:

- High reliability & efficiency
- Proven long life designs
- Customizable models for your application

APPLICATIONS:

- Particle accelerator

CPI 250 kW UHF-Band Pulsed Klystron: VKP-8290A

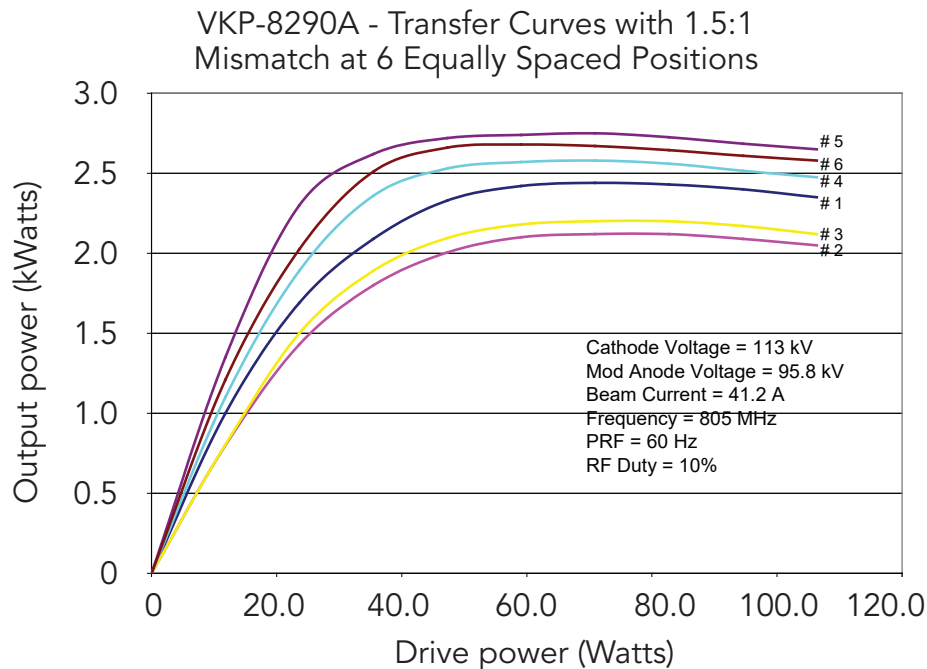
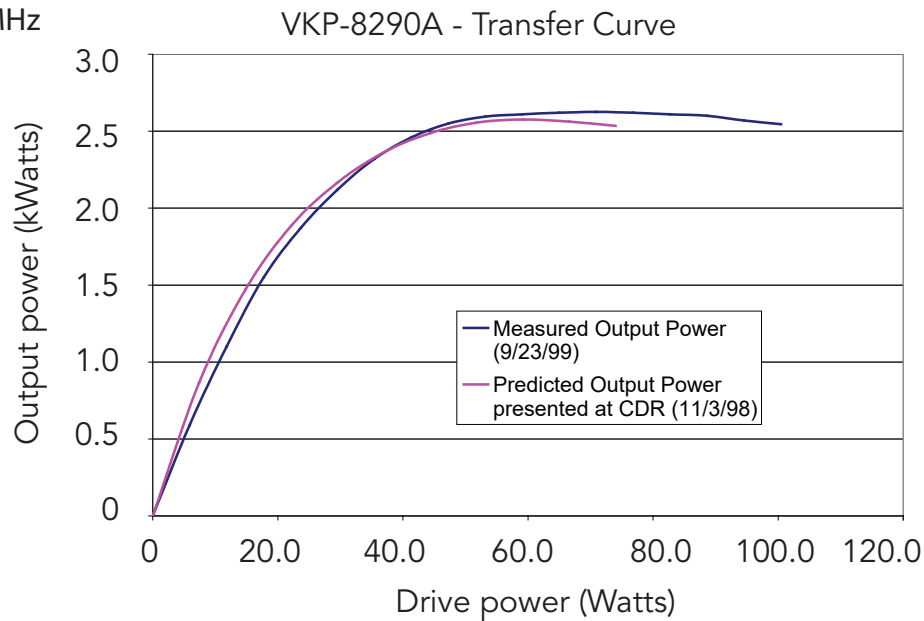
Measured Test Data

Peak beam voltage: 113 kV

Peak beam current: 41.5 A

Peak mod anode voltage: 96 kV

Frequency: 805 MHz



With a history of producing high quality products, we can help you with your klystron.

Contact us at MPPMarketing@cpii.com or call us at +1 650-846-2800. The data should be used for basic information only

Formal, controlled specifications may be obtained from CPI for use in equipment design.



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For more detailed information, please refer to the corresponding CPI technical description if one has been published, or contact CPI. Specifications may change without notice as a result of additional data or product refinement. Please contact CPI before using this information for system design.

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