

CPI/Microwave Power Products (MPP) offers klystrons for particle accelerator applications. The VKL-7811 series of klystrons provides up to 10 kilowatts CW at 1.3 or 1.497 GHz. Its robust design has a proven long life and reliability.

The VKL-7811W is the predominant klystron in the 338 sockets of the CEBAF Accelerator at the Thomas Jefferson National Accelerator Facility (TJNAF) and has a MTBF of 165,717 filament hours over 17 years of service (reported at the CWRP '08 Workshop in March 2008).



### FEATURES

- Compact
- Water Cooled
- Permanent Magnet Focusing
- Coaxial or Waveguide Output
- Hundreds in Service
- Long Life
- Proven Reliability

### MODELS AVAILABLE

- VKP-7811W
- VKP-7811E
- VKP-7811ST

### TYPICAL OPERATING PARAMETERS

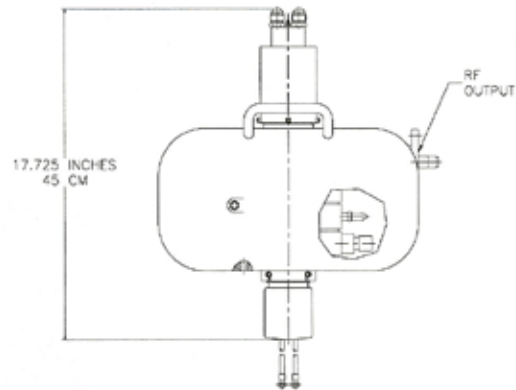
TYPICAL OPERATING PARAMETERS		
<b>VKL-7811W (Output Connector: Modified 1-5/8 Coax)</b>		
Output Power	5.5	kW
Beam Voltage	11.6	kV
Beam Current	1.3	A
Drive Power	1.5	W
Frequency	1497	MHz
-3 dB Bandwidth	6.3	MHz
<b>VKL-7811E (Output Connector: 1-5/8 Coax)</b>		
Output Power	11.0	kW
Beam Voltage	15.0	kV
Beam Current	1.95	A
Drive Power	3.5	W
Frequency	1300	MHz
-3 dB Bandwidth	4.0	MHz
<b>VKL-7811ST (Output Connector: WR-650 W/G Flange)</b>		
Output Power	11.0	kW
Beam Voltage	15.0	kV
Beam Current	1.95	A
Drive Power	3.5	W
Frequency	1300	MHz
-3 dB Bandwidth	4.0	MHz

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](http://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](mailto:marketing@cpii.com)

## VKL-7811W Layout Drawing

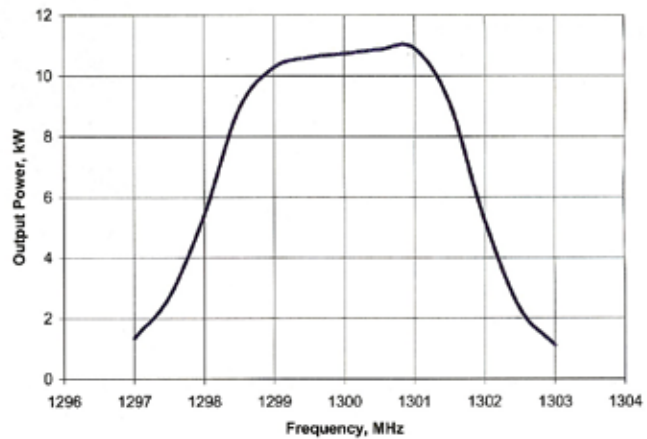


## Frequency Response

Data from VKL-7811 ST, S/N 1009

Beam Voltage = 15 kV

Beam Current = 1.95 A

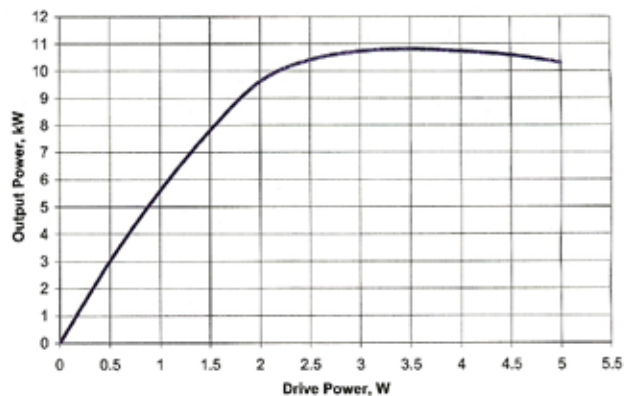


## Transfer Curve

Data from VKL-7811 ST, S/N 1009

Beam Voltage = 15 kV

Beam Current = 1.95 A



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