

## Communications & Power Industries Klystrons



CPI/Microwave Power Products (MPP) offers super-power klystrons for particle accelerator applications. Typical performance for these devices are operating frequencies of 350 to 700 MHz and output power up to 1.3 MW CW. The VKP-7952 Series provides output power of 1 MW CW or peak for long pulse operation at 700 MHz.

- VKP-7952A - 1 MW CW at 700 MHz, features an electron gun with a modulating anode
- VKP-7952B - 1 MW CW at 704 MHz, features a diode gun
- VKP-7952C - 1 MW pulsed at 704 MHz, 2 mSec RF pulse length with a diode gun

### FEATURES:

- 6-cavity RF circuit, including one 2nd harmonic cavity for enhanced efficiency
- Single coaxial output window
- Collector capable of dissipating the full beam power

### BENEFITS:

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

### APPLICATIONS:

- Particle accelerator

### Typical Operating Parameters

Minimum power output	1000 kW
Maximum beam voltage	95 kV
Maximum beam current	21 A
Mod anode voltage	75 kV
Frequency	700 MHz
1 dB bandwidth	±0.7 MHz
Minimum saturated gain	40 dB
Minimum efficiency	65%
Collector coolant flow	380 gpm
Body I coolant flow	10 gpm
O/P Window cooling (air)	10 gpm
Electromagnet	
Gun coil current	5 Adc
Gun coil voltage	8 V
Main coil current	22 Adc
Main coil voltage	180 V
Size with accessories	
Length	186 in/472 cm
Width	37 in/94 cm
Height	60 in/152 cm
Weight	5200 lbs/2360 kg

# CPI UHF 1.3 MW CW and Pulsed Klystrons: VKP-7952A, B, C

## Typical Performance Characteristics

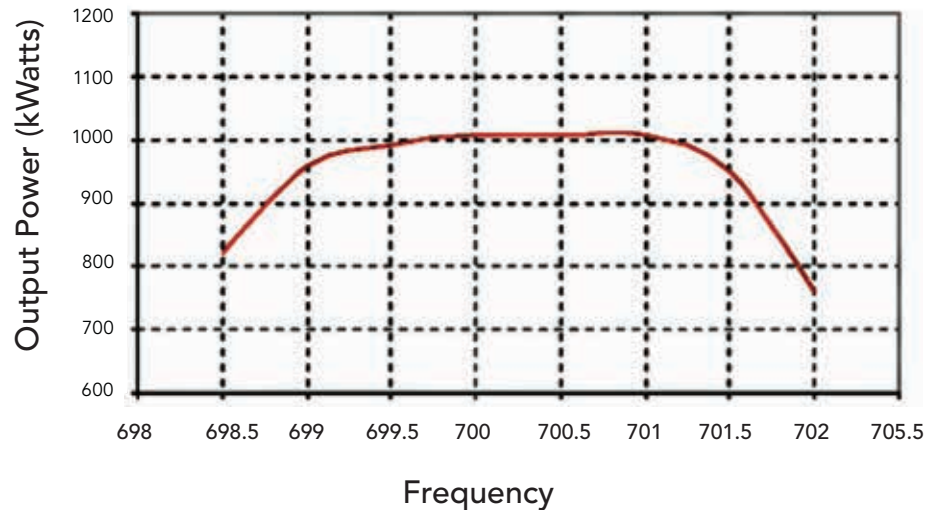
Measured data for the VKP-7952A serial number 001

Beam voltage: 92 kV

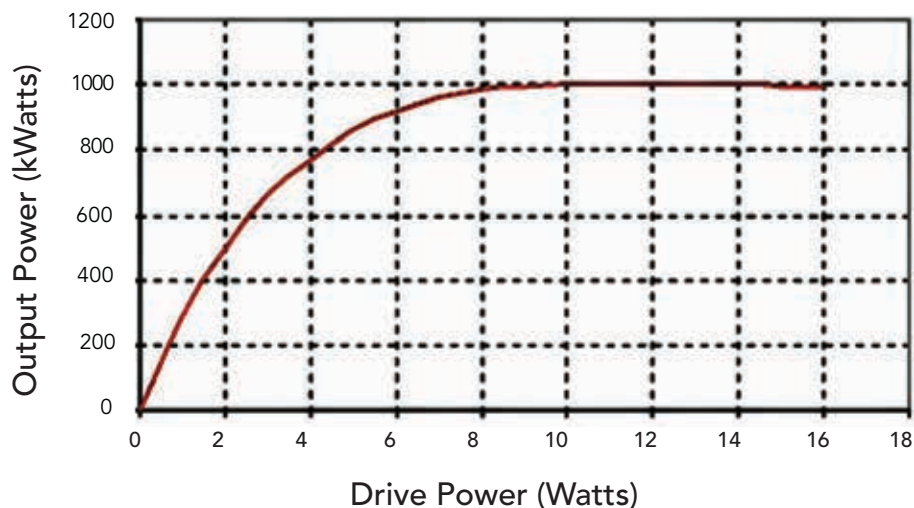
Beam current: 16.7 A

Mod Anode Voltage: 75 kV

Frequency response:



Transfer curve:



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

**Contact us at [MPPMarketing@cpii.com](mailto: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.