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

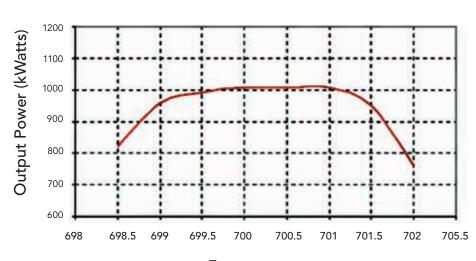
Typical Performance Characteristics

Measured data for the VKP-7952A serial number 001

Beam voltage: 92 kV Beam current: 16.7 A

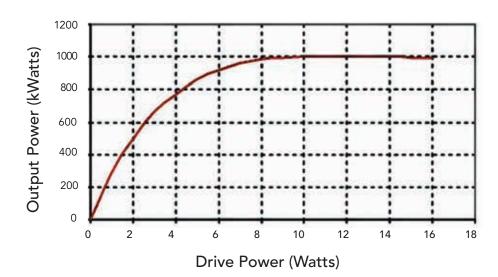
Mod Anode Voltage: 75 kV

Frequency response:



Frequency

Transfer curve:



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.



Microwave Power Products Division 811 Hansen Way Palo Alto, California USA 94304 tel +1 650-846-2800 fax +1 650-856-0705 email MPPMarketing@cpii.com web www.cpii.com/MPP 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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