

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.



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

MODELS AVAILABLE

- 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

TYPICAL OPERATING PARAMETERS

Output Power	1,000	kWatts (min)
Beam Voltage	95	kV (max)
Beam Current	21	A (max)
Mod Anode Voltage	75	kV
Frequency	700	MHz
1 dB Bandwidth	±0.7	MHz (min)
Saturated Gain	40	dB (min)
Efficiency	65	% (min)
Collector Coolant Flow	380	gpm
Body I Coolant Flow	10	gpm
Body II Coolant Flow	10	gpm
O/P Window Cooling (Air)	35	cfm
Electromagnet:		
Gun Coil Current	5	Amps dc
Gun Coil Voltage	8	Volts
Main Coil Current	22	Amps dc
Main Coil Voltage	180	Volts
Size with Accessories:		
Length	186 / 472	inches / cm
Width	37 / 94	inches / cm
Height	60 / 152	inches / cm
Weight	5,200 / 2,360	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

TYPICAL PERFORMANCE CHARACTERISTICS

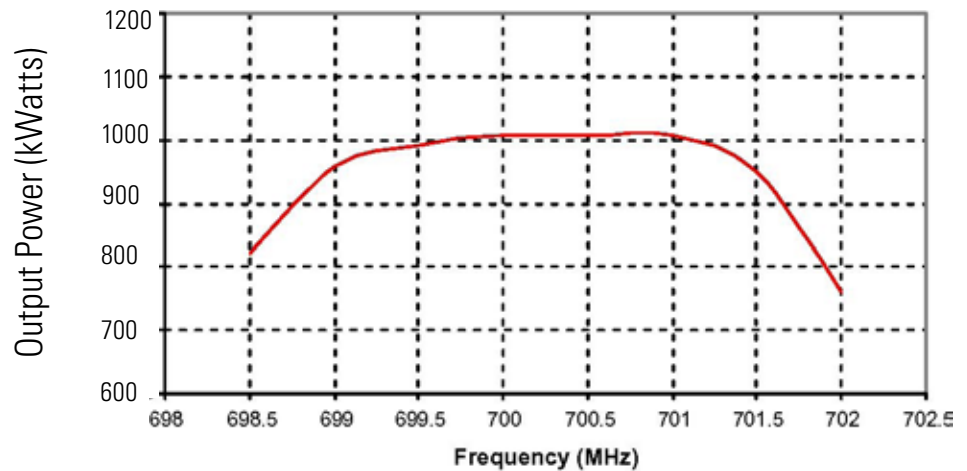
Measured data for the VKP-7952A serial number 001:

Beam voltage: 92 kV

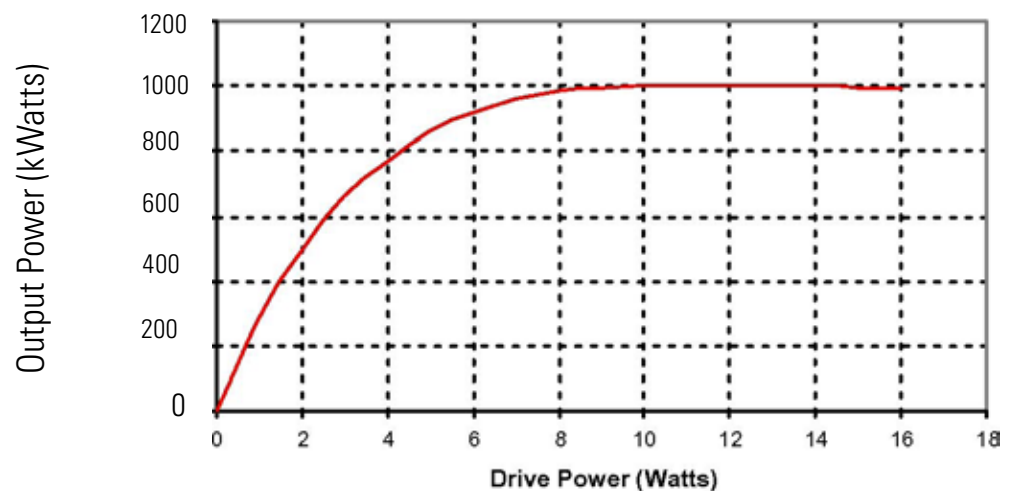
Beam current: 16.7 A

Mod Anode Voltage: 75 kV

Frequency Response



Transfer Curve



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