superpower 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

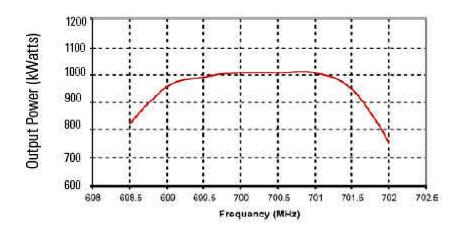
Output Power	1,000	kWatts (min)
Beam Voltage	95	kV (max)
Beam Current	21	A (max)
Mod Anode Voltage	75	kV
Frequency	700	MHz
1 dB Bandwidth	±0.7	MHz (min)
Saturated Gain	40	dB (min)
Efficiency	65	% (min)
Collector Coolant Flow	380	gpm
Body I Coolant Flow	10	gpm
Body II Coolant Flow	10	gpm
O/P Window Cooling (Air)	35	efm
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

# 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

