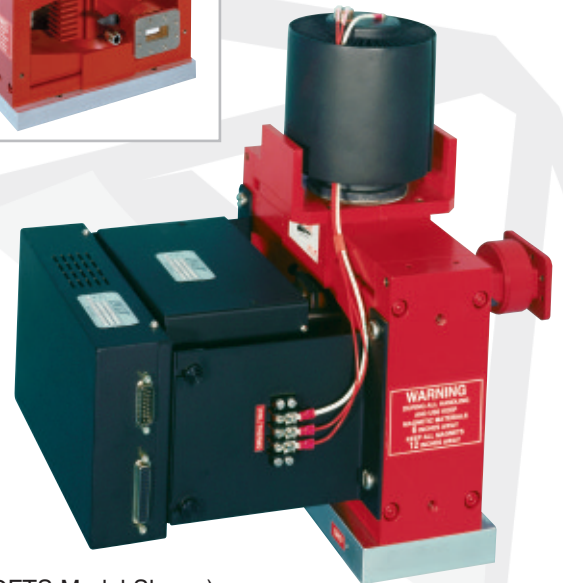
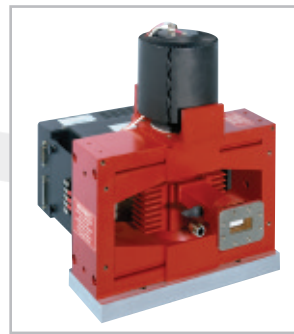


# C-Band Klystrons

## VA936/VKC7936 Series

The VA936/VKC7936 Series of klystron is designed for use in ground based earth-to-satellite communication amplifiers. The VA936/VKC7936 Series is available in various configurations and frequency ranges to suit customer's exact requirements. This family of klystrons has output power specifications ranging from 1500 to 3350 watts over 40 or 45 MHz of instantaneous bandwidth. These klystrons can be configured to provide users with 6,12, or 24 channel configurations thus allowing operators to select preset center frequencies within seconds. As an option, Digital Fast Tuner System (DFTS) channel changers are available for sub-second selection of up to 50 channels.



(DFTS Model Shown)

### **RF and Electrical Specifications**

Frequency Range (Channel Centers)

VA936/VKC7936G, and L	5.925 to 6.425 GHz
VA936/VKC7936J	5.925 to 6.425 GHz
VA936/VKC7936R, and T	5.850 to 6.425 GHz
VKC 7936W	5.945 to 6.455 GHz
VKC 7936X	5.945 to 6.435 GHz
VKC 7936Y	5.850 to 6.480 GHz

Output Power

VA936/VKC936J and T	1500W
VA936/VKC7936G	3000W
other models	3350W

Instantaneous Bandwidth-minimum at -1 dB points

VA936/VKC936J and T	40 MHz
other models	45 MHz

Gain - minimum (at rated power)

VA936/VKC936J and T	37 dB
other models	40 dB

Beam Voltage - maximum

VA936/VKC936J and T	6.8 kV
VA936/VKC7936G	8.15 kV
Other Models	8.3 kV

Beam Current - maximum

VA936/VKC936J and T	0.825 A
other models	1.15 A

Heater Voltage - nominal

Heater Current - typical

### **Physical Characteristics**

Dimensions	See outline drawings.
Weight - approximate	70 lb (32 kg)
Operating Orientation	Collector up
Cooling	Forced Air
collector flow - minimum	
VA936/VKC7936J and T	375 lb/hr (170 kg/hr)
other models	1000 lb/hr (450 kg/hr)
body flow - minimum	90 lb/hr (41 kg/hr)
RF Connectors	
output	Mates with CPR-137F flange
input	Mates with type "N" plug, UG-21D/U
Focusing	Integral permanent magnet

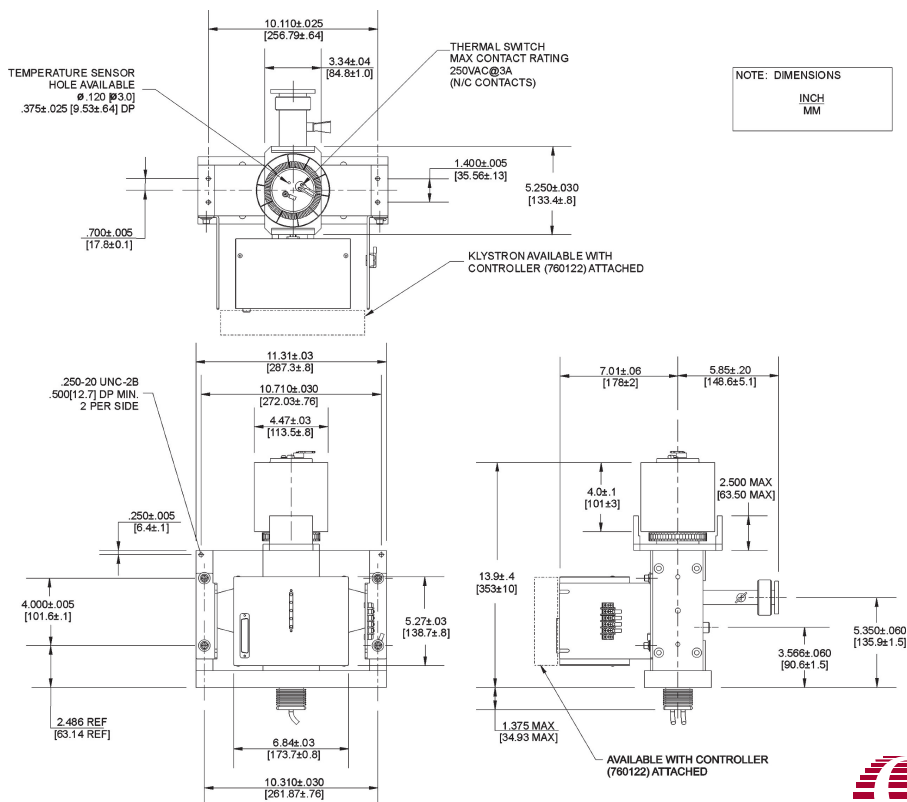
# VA936/VKC7936 Series

## Typical Characteristics

Type	Frequency Range (GHz)*Note 1	Instantaneous Bandwidth (MHz)*Note 2	Output Power (W)	Gain (dB)	Beam Voltage (kV)	Beam Current (mA)
VA936/VKC7936J	5.925 - 6.425	45	1550	40	6.8	0.83
VA936/VKC7936T	5.850 - 6.425	50	1550	40	6.8	1.10
VA936/VKC7936G	5.925 - 6.425	50	3100	43	8.15	1.10
VKC7936L	5.925 - 6.425	50	3450	44	8.3	1.10
VKC7936R	5.850 - 6.425	50	3450	44	8.3	1.10
VKC7936W	5.945 - 6.455	50	3450	44	8.3	1.10
VKC7936X	5.945 - 6.435	50	3450	44	8.3	1.10
VKC7936Y	5.850 - 6.480	50	3450	44	8.3	1.10

- Note 1: Frequencies listed are channel centers.
- Note 2: Bandwidth measured at -1dB points.
- For full specifications please contact CPI.

## Sample Outline Drawing



For complete information on the full VA936/VKC7936 Series and other klystrons used in satellite communications, please contact your local CPI office, or CPI Canada Inc.



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