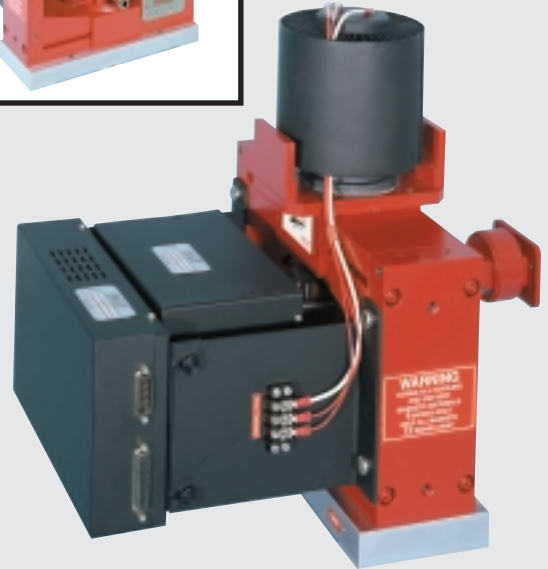
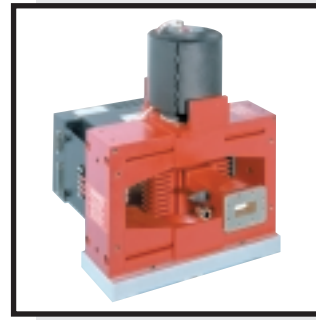


# C-Band Klystrons

## VKC7980 - Wide Bandwidth Series

The Wide Bandwidth C-Band klystron series is designed for use in ground based earth-to-satellite communication amplifiers. This family of klystrons provides a minimum output power of 3000 watts over an instantaneous bandwidth of 80 MHz. These klystrons are configured to provide users with 12 channels 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.



### RF and Electrical Specifications

Center Channel Frequency Range	
VKC7980B	5.850 to 6.450 GHz
VKC7980W	5.850 to 6.480 GHz
Output Power - minimum at -1 dB points	
All Models	3000W
Instantaneous Bandwidth - minimum at -1 dB points	
All Models	80MHz
Gain - minimum	30 dB
Beam Voltage - maximum	10.0 kV
Beam Current - maximum	1.25A
Body Current - maximum	50 mA
	- typical 20 mA
Heater Voltage - nominal 6.0 V	
Heater Current - maximum	7.0 A
	- typical 6.5 A

### Physical Characteristics

Dimensions	See outline drawing.
Weight - approximate	70 lb (32 kg)
Operating Orientation	Any - normally collector up
Cooling	
Forced Air	
collector flow - minimum	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

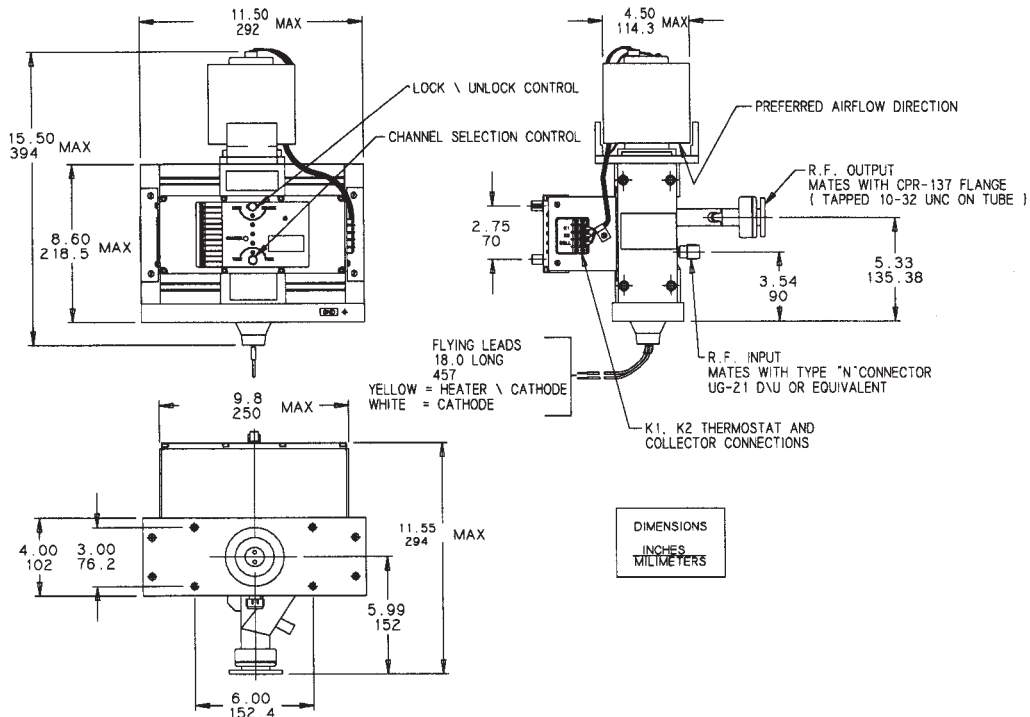
# VKC7980 - Wide Bandwidth Series

## Typical Characteristics

Type	Frequency Range (GHz)*Note 1	Instantaneous Bandwidth (GHz)*Note 2	Output Power (W)	Gain (dB)	Beam Voltage (kV)	Beam Current (mA)
VKC7980B	5.850 - 6.450	89	3079	33	8.3	1.14
VKC7980W	5.850 - 6.480	90	3075	34	8.4	1.14

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

## Typical Outline Drawing



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

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