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.



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 6.0 V

Heater Current - typical 6.0 A



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



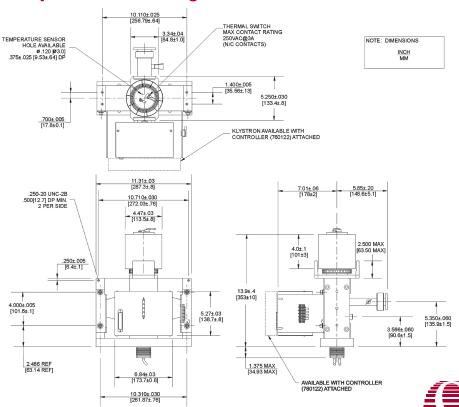
VA936/VKC7936 Series

Typical Characteristics

Туре		iency Range Hz)*Note 1	Instantaneous Bandwidth (MHz)*Note 2	Output Power (W)	Gain (dB)	Beam Voltage (kV)	Beam Current (mA)
VA936/VKC79	936J	5.925 - 6.425	45	1550	40	6.8	0.83
VA936/VKC79	936T	5.850 - 6.425	50	1550	40	6.8	1.10
VA936/VKC79	936G	5.925 - 6.425	50	3100	43	8.15	1.10
VKC7936	SL	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		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.

Communications & Power Industries Canada Inc.
45 River Drive / Georgetown, Ontario / Canada L7G 2J4
Hot Line Telephone: 1-800-267-JETSAT
Tel: (905) 877-0161 Fax: (905) 877-5327
E-MAIL: marketing@cmp.cpii.com
WEB: www.cpii.com/cmp