

November 14, 1958

THYRATRON TYPE WL-7321/C6J/L

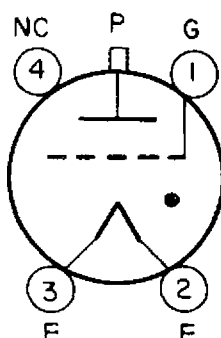
The WL-7321/C6J/L thyatron is a three-electrode, grid-controlled, Xenon-gas-filled rectifier with negative control characteristics. Cooling is obtained by unrestricted air convection, and the tube operates over a wide temperature range from -55 to +75 degrees Centigrade. The filamentary-type coated cathode is heated directly from a 2.5-Volt a-c supply. The WL-7321/C6J/L is designed for power-control applications where stable characteristics are necessary over a wide temperature range. The WL-7321/C6J/L is electrically similar to the WL-5685/C6JA and WL-6860/C6J/F.

ELECTRICAL:

	Min.	Bogey	Max.	
Filament, cathode directly heated				
Voltage Δ	2.38	2.5	2.63	Volts
Current	19	21	23	Amp
Heating Time, approx.	60	—	—	Sec
Deionization Time, approx.	—	—	1000	μ sec
Critical Grid Current	—	—	10	μ amp
Critical Anode Voltage at Grid				
Voltage of +4 Volts	—	—	75	Volts
Negative Grid Voltage	—	—	100	Volts
Interelectrode Capacitance, approx.				
Grid to Anode	—	4	—	μ uf
Grid to Filament	—	21	—	μ uf
Typical Arc Voltage Drop	—	9	—	Volts
Critical Grid Voltage at Anode				
Voltage of 1000 Volts (See CE-A1138).	-3	-4.6	-6.2	Volts Negative
Control Characteristics				

MECHANICAL:

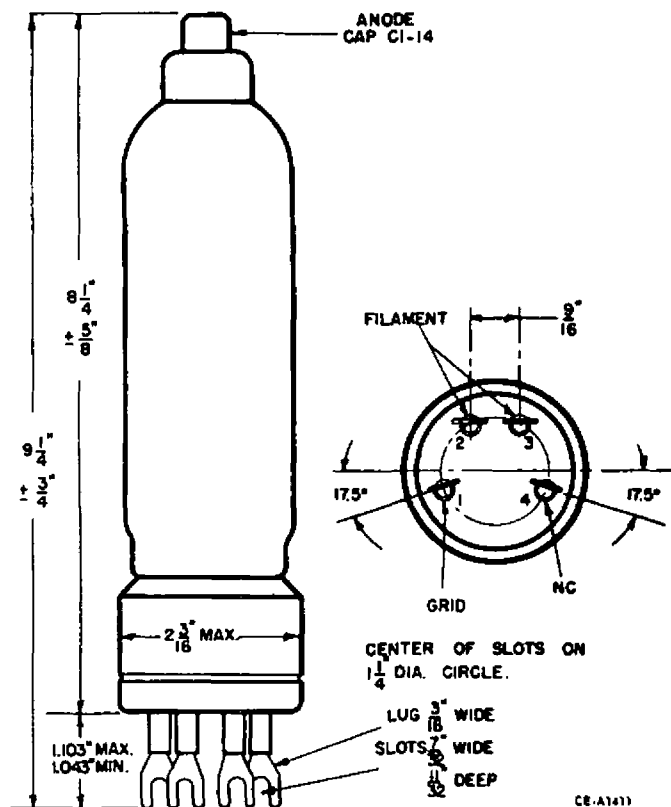
Mounting Position	Vertical, base down
Overall Height, approx.	9-1/4"
Overall Diameter, approx.	2"
Type of Cooling	Air, unrestricted convection
Temperature Range	-55 to +75 °C
Bulb	T-16
Anode Cap	Medium Skirted JETEC C1-14
Base	Lug Size and Location per JETEC A4-90
Net Weight, approx.	7 oz
Shipping Weight, approx.	2 lb



BASE CONNECTIONS

G - Control Grid
F - Filament
P - Anode
NC - No Connection

CE-A1137



CE-A1411

Thyatron Section

WESTINGHOUSE ELECTRIC CORPORATION, ELECTRONIC TUBE DIVISION, ELMIRA, NEW YORK

from JETEC release #2349, Dec. 29, 1958

MAXIMUM RATINGS:**Absolute Values ■****Peak Anode Voltage, max.**

Forward	1000	Volts
Inverse	1250	Volts

Anode Current, max.

Peak	77	Amp
Average, continuous	6.4	Amp
Average Overload (3 seconds), max.	12.8	Amp

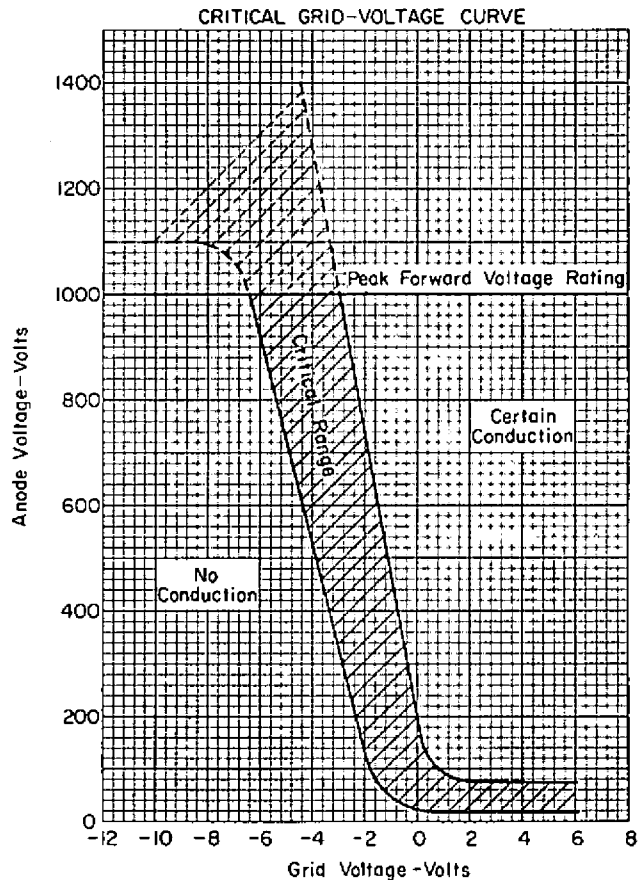
Surge Current, maximum duration

0.1 second	770	Amp
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Temperature Range	-55 to +75	°C
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Commutation Factor, max. ♣	0.66	
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- ▲ Filament, pin No. 2 should be negative with respect to pin No. 3 during the anode conduction period.
- All of the ratings are for return connections to the center tap of the filament transformer secondary.
- ♣ The commutation factor is defined as the product of the rate of current decay, immediately preceding the end of the commutation period, in amperes per microsecond and the rate of rise of the initial inverse voltage in volts per microsecond, or $CF = \text{amp}/\mu\text{sec} \times \text{volts}/\mu\text{sec}$.



CE-A1138

Shaded space between limiting curves represents the area of conduction and indicates variations which may be expected initially and throughout the life of the tube when operated within the specified temperature range.