

March 9, 1959

THYRATRON TYPE WL-7269

The WL-7269 is a three-electrode mercury-vapor thyatron with negative control characteristics. The tube is designed for rectifier and industrial control service.

ELECTRICAL:

	Min.	Bogey	Max.	
Filament Voltage	4.75	5.00	5.25	Volts
Filament Current at Bogey Voltage . .	4.50	5.00	5.50	Amp.
Cathode Heating Time*	300	-	-	Sec.
Interelectrode Capacitance:				
Anode to Grid	-	10	-	uuf
Deionization Time, approx.	-	1000	-	usec
Ionization Time, approx.	-	10	-	usec
Anode Voltage Drop	-	15	-	Volts

MECHANICAL:

Type of Cooling, Δ	Air Convection
Mounting Position	Vertical, Base Down
Net Weight, approx.	11 Ounces
Shipping Weight, approx.	2 Pounds

MAXIMUM RATINGS:

Absolute Values

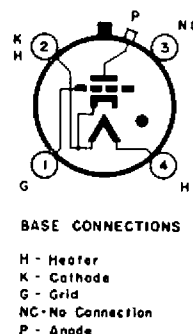
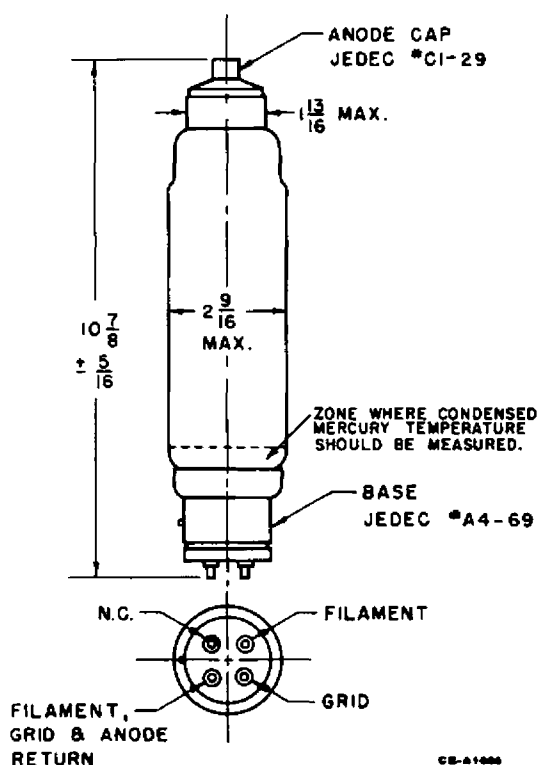
Maximum Peak Anode Voltage:		
Forward (see temperature range)	15000	21000 Volts
Inverse (see temperature range)	15000	21000 Volts
Maximum Cathode Current:		
Peak	12.0	12.0 Amp.
Average	3.2	3.2 Amp.
Surge (max. duration 0.1 second)	50	50 Amp.
Max. Average Time $\S$	1.0	1.0 Cycle
Maximum Negative Control Grid Voltage:		
Before Conduction	-500	-500 Volts
During Conduction	-10	-10 Volts
Maximum Positive Control Grid Voltage:		
Anode Negative	10	10 Volts
Maximum Positive Control Grid Current:		
Peak	1.0	1.0 Amp.
Average	0.1	0.1 Amp.
Maximum Average Time $\S$	1.0	1.0 Cycle
Condensed-Mercury Temperature Limits $\blacksquare$	25-55	25-50 °C
Frequency Range	25-150	25-150 cps
Equilibrium Condensed-Mercury Temperature Rise Above Ambient:		
No Load, approx.	9	°C

* The minimum heating time refers only to the cathode. Sufficient additional time must be allowed, during cold-weather periods, to permit the condensed-mercury temperature to rise to the minimum condensed-mercury temperature limit.

Δ Forced-air cooling will be required in many applications to maintain the condensed-mercury temperature within the specified condensed-mercury temperature limits.

$\blacksquare$ The optimum condensed-mercury temperature limits for 20000-volt operation are 35-45° C. For 15000-volt operation the optimum limits are 35-50° C.

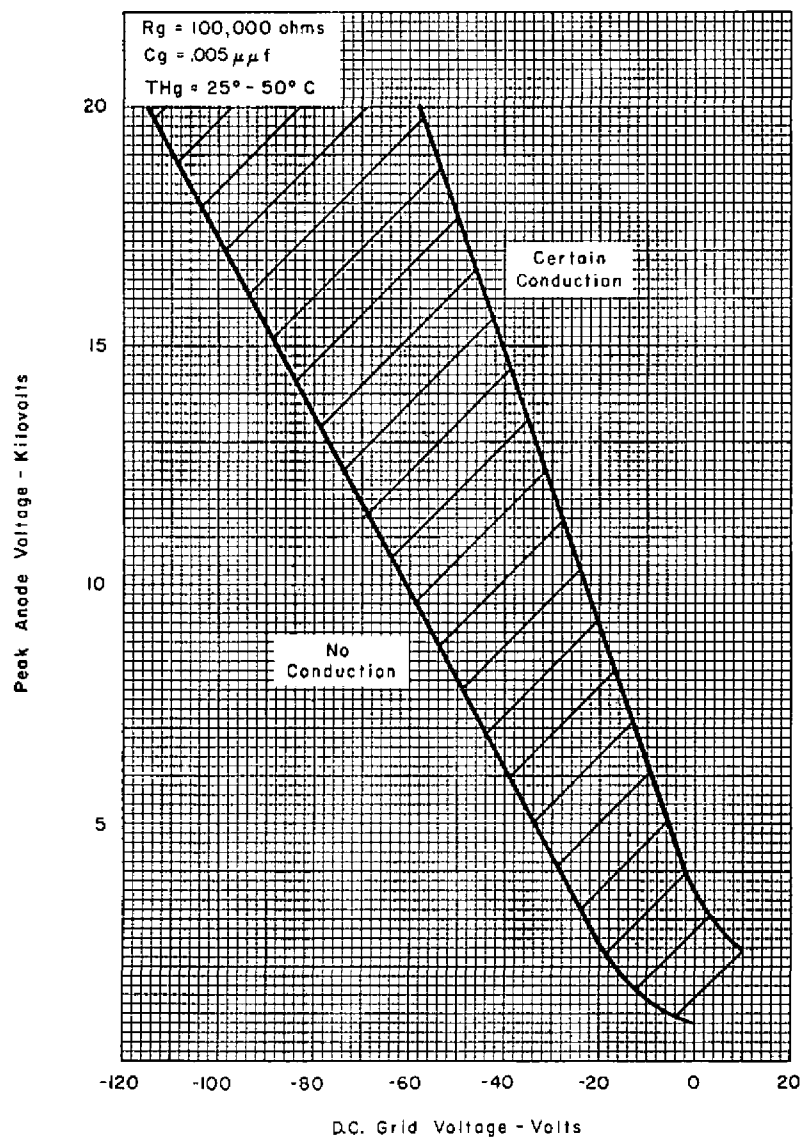
$\S$ One period of the supply frequency.



CE-A1403

Thyatron Section

CONTROL CHARACTERISTICS



CE-A1447