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# THYRATRON

MERCURY-VAPOR TETRODE

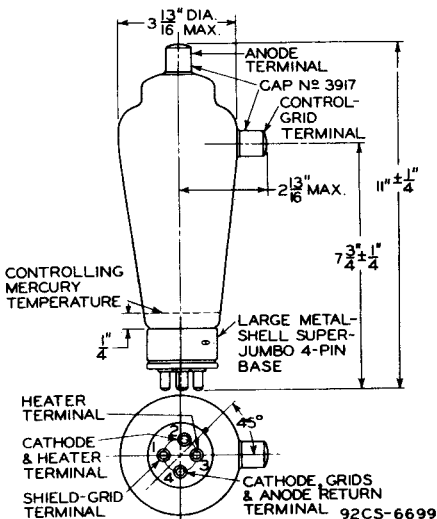
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<u>Electrical:</u>	<u>DATA</u>				
	<u>Continuous Service</u>		<u>Intermittent Service</u>		
<b>Heater, for Unipotential Cathode:</b>					
Voltage* . . . . .	5.0	5.0	5.5	5.0	volts
Current. . . . .	10.0	10.0	11.0	10.0	amp
<b>Direct Interelectrode Capacitance:</b>					
Grid-No.1 to Anode (Approx.)	0.3	0.3	0.3	0.3	µmf
Peak Voltage Drop (Approx.)	16	16	16	16	volts
<b>Approx. Control Characteristics:</b>					
Anode Voltage. . . . .	100	1000	100	1000	volts
Grid-No.2 Voltage. . . . .	0	0	0	0	volts
Grid-No.1 Voltage. . . . .	+1	-9	+1	-9	volts
Ionization Time (Approx.)	10	10	10	10	µsec.
Deionization Time (Approx.)	1000	1000	1000	1000	µsec.
<b><u>Mechanical:</u></b>					
Mounting Position. . . . .	Vertical, Base Down				
Overall Length. . . . .	11" ± 1/4"				
Seated Length. . . . .	10-1/4" ± 1/4"				
Greatest Radius. . . . .	2-13/16"				
Bulb . . . . .	ST-30				
Caps . . . . .	No. 3917				
Base . . . . .	Super-Jumbo 4-Pin, with Bayonet				
<b><u>Maximum Ratings, Absolute Values:</u></b>					
	<u>Continuous Service</u>		<u>Intermittent Service</u>		
PEAK FORWARD ANODE VOLT.	2500	750	10000		max.volts
PEAK INVERSE ANODE VOLT.	2500	750	10000		max.volts
GRID-No.1 (CONT.GRID) VOLT.:					
Before Conduction. . .	-1000	-1000	-1000		max.volts
During Conduction. . .	-10	-10	-10		max.volts
GRID-No.2 (SH'LD GRID) VOLT.:					
Before Conduction. . .	-500	-500	-500		max.volts
During Conduction. . .	-10	-10	-10		max.volts
INSTANTANEOUS ANODE CUR.:					
Below 25 Cycles. . . .	12.8	5.0	8.0		max.amp
25 Cycles and Higher .	40	77	16		max.amp
AVERAGE ANODE CURRENT. .	6.4	2.5	4.0		max.amp
SURGE ANODE CUR., for					
0.1 sec., max. . . . .	400	400	160		max.amp
INSTANTANEOUS GRID-No.1 CUR.	1.0	1.0	1.0		max.amp
AVERAGE GRID-No.1 CUR. .	0.25	0.25	0.25		max.amp
INSTANTANEOUS GRID-No.2 CUR.	2.0	2.0	2.0		max.amp
AVERAGE GRID-No.2 CUR. .	0.5	0.5	0.5		max.amp
TIME OF AVERAGING CURRENT	15	5	15		max.sec
COND.-MERCURY TEMP. RANGE <sup>▲</sup>	40-80	30-95	25-50		°C

\* Must be applied 5 minutes before anode voltage is applied.  
 ▲ Recommended condensed-mercury temperature = 40°C.



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OPERATIONAL REGION OF CRITICAL GRID VOLTAGE

