



6012

6012

GAS THYRATRON

NEGATIVE-CONTROL TETRODE TYPE

GENERAL DATA**Electrical:**

Heater, for Unipotential Cathode:

	Min.	Average	Max.	
Voltage	5.7	6.3	6.9	ac or dc volts
Current at 6.3 volts	-	2.6	2.85	amp

Cathode:

Minimum heating time prior to tube conduction	30	sec
Maximum outage time without reheating	5	sec

Direct Interelectrode Capacitances

(Approx.):^o

Grid No.1 to anode	0.23	μf
Grid No.1 to cathode, grid No.2, and heater	5.8	μf
Anode to cathode, grid No.2, and heater	3.9	μf

Ionization Time (Approx.):

For conditions: dc anode volts = 100, grid-No.2 volts = 0, grid-No.1 square-pulse volts = +50, and peak anode amperes during conduction = 5	0.5	μsec
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Deionization Time (Approx.)

See Table I ←

Maximum Critical Grid-No.1 Current:

For conditions: ac anode-supply volts = 460 (rms), and average anode amperes = 0.5	3	μamp
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Anode Voltage Drop (Approx.) 10 volts

Grid-No.1 Control Ratio (Approx.):

For conditions: grid-No.1 resistor (megohms) = 0, grid-No.2 resistor (megohms) = 0, and grid-No.2 volts = 0	150
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Grid-No.2 Control Ratio (Approx.):

For conditions: grid-No.1 resistor (megohms) = 0, grid-No.2 resistor (megohms) = 0, and grid-No.1 volts = 0	650
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Mechanical:

Mounting Position	Any
Maximum Overall Length	3-7/8" ←
Maximum Seated Length	3-5/16" ←
Maximum Diameter	1-23/32" ←
Bulb	T-12 ←
Base	Large-Wafer Octal 6-Pin ←
with External Barriers and Sleeve (JETEC No.B6-100)	

^o Without external shield.

← Indicates a change.

6012



6012

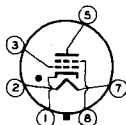
GAS THYRATRON

Basing Designation for BOTTOM VIEW 6C0

Pin 1 - Cathode

Pin 2 - Heater

Pin 3 - Grid No.1



Pin 5 - Anode

Pin 7 - Heater

Pin 8 - Grid No.2

RELAY AND GRID-CONTROLLED RECTIFIER SERVICE

For anode-supply frequency of 60 cps

Maximum Ratings, Absolute Values:

PEAK ANODE VOLTAGE:

Forward	650 max.	volts
Inverse	1300 max.	volts

GRID-No.2 (SHIELD-GRID) VOLTAGE:

Peak, before tube conduction	-100 max.	volts
Average [#] , during tube conduction	-10 max.	volts

GRID-No.1 (CONTROL-GRID) VOLTAGE:

Peak, before tube conduction	-200 max.	volts
Average [#] , during tube conduction	-10 max.	volts

CATHODE CURRENT:

Peak	5 max.	amp
Average [#]	0.5 max.	amp
Fault, for duration of 0.1 second max.	20 max.	amp

AVERAGE GRID-No.2 CURRENT [#]	+0.05 max.	amp
AVERAGE GRID-No.1 CURRENT [#]	+0.05 max.	amp

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode.	100 max.	volts
Heater positive with respect to cathode.	25 max.	volts

AMBIENT-TEMPERATURE RANGE.	-75 to +90	°C
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Maximum Circuit Values:

Grid-No.1-Circuit Resistance	2 max.	megohms
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[#] Averaged over any interval of 30 seconds maximum.

→ Indicates a change.



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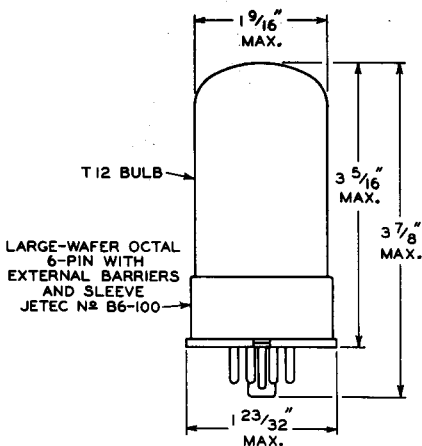
GAS THYRATRON

TABLE I

 E_{cc1} = DC Grid-No.1 Supply Voltage (Volts) E_{cc2} = DC Grid-No.2 Supply Voltage (Volts) R_{g1} = Grid-No.1 Resistor (Megohms) R_{g2} = Grid-No.2 Resistor (Ohms)

DC Anode Volts	125		250		R_{g1}	E_{cc1}	R_{g2}^*	E_{cc2}
DC Anode Amperes	0.5	1.0	0.5	1.0				
DEIONIZATION TIME μ sec (Approx.)	175	225	250	275	0.001	-13	1000	0
	350	375	450	475	0.1			
	650	700	1100	1200	2			
	100	125	100	125	0.001	-100	1000	0
	125	150	150	175	0.1			
	250	275	275	300	2			

* Series resistor between grid No.2 and cathode.



6012



6012

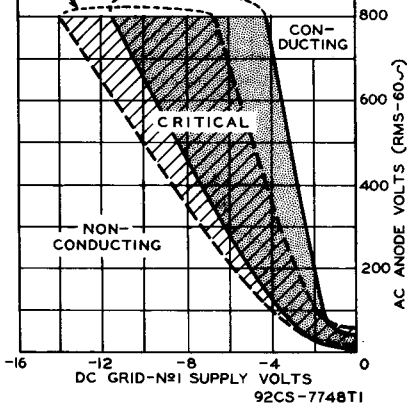
GAS THYRATRON

OPERATIONAL RANGE
OF CRITICAL GRID-N^o2 VOLTAGE

GRID-N^o2 (SHIELD) VOLTS=0
 RANGES SHOWN ARE FOR TWO VALUES
 OF GRID-N^o1 RESISTOR, 0.1 MEG. AND
 2 MEG., AND TAKE INTO ACCOUNT INITIAL
 DIFFERENCES BETWEEN INDIVIDUAL
 TUBES AND SUBSEQUENT DIFFERENCES
 DURING TUBE LIFE. FOR HEATER-
 VOLTAGE RANGE OF 5.7 TO 6.9 VOLTS
 AND FOR AN AMBIENT TEMPERATURE
 RANGE OF FROM -75° TO +90° C.

RANGE FOR
2 MEGOHMS

RANGE FOR
0.1 MEGOHM

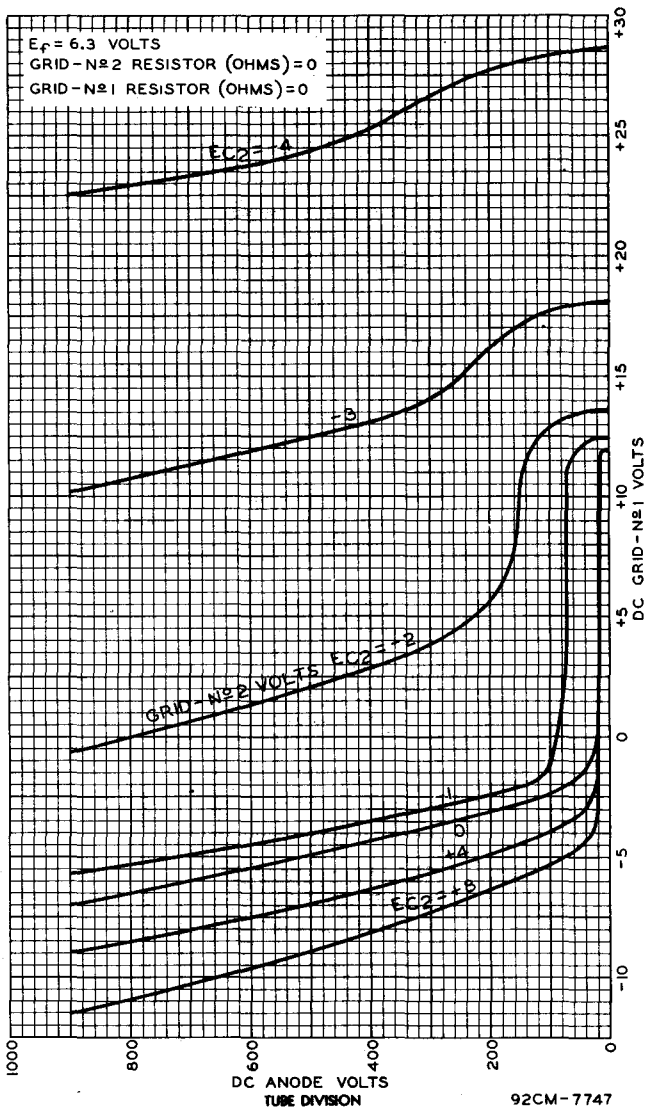




6012

6012

AVERAGE CONTROL CHARACTERISTICS





6012

CHARACTERISTIC CURVES

