GAS-AND-MERCURY-VAPOR THYRATRON
NEGATIVE-CONTROL TRIODE TYPE

GENERAL DATA

Electrical:

Filament, Coated:
Voltage .................................. 2.5 ± 5% ac or dc volts
Current at 2.5 volts .................. 7 amp
Minimum heating time prior to
tube conduction .......................... 15 sec
Direct Interelectrode Capacitance (Approx.): 0
Grid to anode .................................. 1.8 μf
Ionization Time (Approx.):
For conditions: dc anode volts = 100,
peak grid volts = +30, and peak
anode amperes = 6 .................. 3 μsec
Deionization Time (Approx.):
For conditions: dc anode volts = 120,
dc grid-supply volts = -20, grid re-
sistor (ohms) = 10000, and dc
anode amperes = 1.5 .................. 360 μsec
For conditions: dc anode volts = 120,
dc grid-supply volts = -500, grid re-
sistor (ohms) = 100000, and dc
anode amperes = 1.5 .................. 60 μsec
Anode Voltage Drop (Approx.) .................. 15 volts

Mechanical:

Mounting Position .................. Vertical, base down
Maximum Overall Length .............. 6-1/8"  
Seated Length .......................... 5-1/4" ± 1/4"  
Maximum Diameter .................. 2-1/16"  
Cooling .................................. Natural circulation of air around tube
Weight (Approx.) .................. 3 oz  
Bulb .................................. ST-16  
Cap .................................. Medium (JETEC No.C1-5)  
Base .................................. Medium-Shelf Small 4-Pin with Bayonet (JETEC No.A4-10)

Basing Designation for BOTTOM VIEW .................. 3G

Pin 1 - Filament .................................. Pin 4 - Filament
Pin 2 - No Connection .................. Cap - Anode
Pin 3 - Grid ..................................  

CONTROL SERVICE

Maximum Ratings, Absolute Values: For supply frequency up to 400 cps

Operating Condensed-Mercury Temperature Range
-40° to +100°C -40° to +80°C

PEAK ANODE VOLTAGE:
Forward .................................. 200 max. 1250 max. volts
Inverse .................................. 200 max. 1250 max. volts

0 Without external shield.  

Indicates a change.
GRID VOLTAGE:
- Peak or DC, before tube conduction: -500 max. volts
- Average, during tube conduction: -10 max. volts

ANODE CURRENT:
- Peak: 6 max. amp
- Average: 1.5 max. amp
- Fault, for duration of 0.1 second max.: 120 max. amp

GRID CURRENT:
- Average: +0.01 max. amp

△ Averaged over one conducting period.
* Averaged over any interval of 5 seconds maximum.
† Averaged over period of grid conduction.

Operating Condensed-Mercury Temperature Range
-40° to +100°C -40° to +80°C
OPERATIONAL RANGE OF CRITICAL GRID VOLTAGE

Range is for conditions where: $E_f = 2.5$ Volts AC ± 5%; Circuit returns to center tap of filament transformer. The range includes initial and life variations of individual tubes. Grid resistor = 0 to 10,000 ohms. Condensed-mercury temperature = -40°C to +80°C.

Conducting

Critical

Non-conducting

DC Grid-Supply Volts

DC ANODE VOLTS

92CS-6703T2

4-56

TUBE DIVISION
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