Gas and Mercury-Vapor Thyratron

NEGATIVE-CONTROL TRIODE TYPE

GENERAL DATA

Electrical:

Filament, Coated:
- Voltage (AC or DC) .... 2.5 volts
- Current at 2.5 volts ... 5.0 ± 0.5 amp
- Minimum heating time prior to tube conduction ... 5 sec

Direct Interelectrode Capacitance (Approx.):
- Grid to anode ... 2 μf
- Ionization Time (Approx.) ... 10 μsec
- Deionization Time (Approx.) ... 1000 μsec
- Maximum Critical Grid Current ... 5 μa
- Peak Tube Voltage Drop at anode amperes = 3 ... 15 volts

Mechanical:
- Operating Position ... Vertical, base down
- Maximum Overall Length ... 6-1/8" 
- Maximum Diameter ... 2-1/16"
- Weight (Approx.) ... 3 oz
- Bulb ... ST16
- Cap ... Medium (JEDEC No.C1-5)
- Socket ... Small 4-Contact
- Base ... Medium-Shell Small 4-Pin with Bayonet (JEDEC No.A4-10)

Basing Designation for BOTTOM VIEW ... 3G

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

Thermal:
Type of Cooling ... Convection
Temperature Rise of Condensed Mercury to Equilibrium Above Ambient Temperature (Approx.) ... 15 °C

GRID-CONTROLLED-RECTIFIER SERVICE

Maximum and Minimum Ratings, Absolute-Maximum Values:
For anode-supply frequency of 60 cps

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

PEAK NEGATIVE GRID VOLTAGE:
- Before tube conduction ... 500 max. volts
- During tube conduction ... 10 max. volts
ANODE CURRENT:
  Peak.......................... 3 max. amp
  Average\(^{c}\)............... 1 max. amp
  Fault......................... 50 max. amp

CONDENSED-MERCURY TEMPERATURE
  RANGE (Operating)\(^{d}\)..... -40 to +80 \(^\circ C\)

\(^{a}\) With circuit returns to filament-transformer center-tap.
\(^{b}\) Without external shield.
\(^{c}\) Averaged over any interval of 5 seconds maximum.
\(^{d}\) For longest life, the operating condensed-mercury temperature range after
  warm-up should be kept between +40\(^{\circ}\) and +80\(^{\circ}\) \(^\circ C\) which corresponds approxi-
  mately to +100\(^{\circ}\) to +180\(^{\circ}\) \(^\circ C\) ambient.