

# Gas and Mercury-Vapor Thyatron

## NEGATIVE-CONTROL TRIODE TYPE

### GENERAL DATA

#### Electrical:<sup>a</sup>

##### Filament, Coated:

Voltage (AC or DC) . . . . .	2.5	volts
Current at 2.5 volts. . . . .	6.3 ± 0.8	amp
Minimum heating time prior to tube conduction . . . . .	15	sec

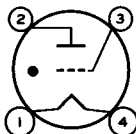
##### Direct Interelectrode Capacitance (Approx.):<sup>b</sup>

Grid to anode . . . . .	3	μf
Ionization Time (Approx.) . . . . .	10	μsec
Deionization Time (Approx.) . . . . .	1000	μsec
Maximum Critical Grid Current . . . . .	10	μa
Peak Tube Voltage Drop at anode amperes = 5 . . . . .	8	volts

#### Mechanical:

Operating Position. . . . .	Vertical, base down
Maximum Overall Length. . . . .	4-3/8"
Diameter. . . . .	1.438" to 1.562"
Weight (Approx.) . . . . .	3 oz
Bulb. . . . .	T12
Socket. . . . .	Small 4-Contact
Base. . . . .	Medium-Shell Small 4-Pin with Bayonet (JEDEC No.A4-10)
Basing Designation for BOTTOM VIEW. . . . .	.4D

Pin 1 - Filament  
Pin 2 - Anode



Pin 3 - Grid  
Pin 4 - Filament

#### Thermal:

Type of Cooling . . . . .	Convection
Temperature Rise of Condensed Mercury to Equi- librium Above Ambient Temperature (Approx.) . . . . .	30 °C

### GRID-CONTROLLED-RECTIFIER SERVICE<sup>a</sup>

#### 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



## CATHODE CURRENT:

Peak. . . . .	8 max.	amp
Average <sup>c</sup> . . . . .	1 max.	amp
Fault . . . . .	80 max.	amp

## CONDENSED-MERCURY TEMPERATURE

RANGE (Operating) <sup>d</sup> . . . . .	-40 to +80	°C
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<sup>a</sup> with circuit returns to filament-transformer center-tap.

<sup>b</sup> without external shield.

<sup>c</sup> Averaged over any interval of 5 seconds maximum.

<sup>d</sup> For longest life, the operating condensed-mercury temperature range after warm-up should be kept between +40° and +80° C which corresponds approximately to +10° to +50° C ambient.

