

# 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. . . . .	21 ± 2	amp
Minimum heating time prior to tube conduction . . . . .	60	sec

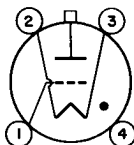
##### Direct Interelectrode Capacitance (Approx.):<sup>b</sup>

Grid to anode . . . . .	4	μf
Ionization Time (Approx.) . . . . .	10	μsec
Deionization Time (Approx.) . . . . .	1000	μsec
Maximum Critical Grid Current . . . . .	10	μa
Peak Tube Voltage Drop at anode amperes = 20. . . . .	12	volts

#### Mechanical:

Operating Position. . . . .	Vertical, base down
Maximum Overall Length. . . . .	9-1/2"
Maximum Diameter. . . . .	2-9/16"
Weight (Approx.). . . . .	9 oz
Cap . . . . .	Medium (JEDEC No. C1-5)
Socket. . . . .	Super-Jumbo 4-Contact
Base. . . . .	Large-Metal-Shell Super-Jumbo 4-Pin with Bayonet (JEDEC No. A4-18)
Basing Designation for BOTTOM VIEW. . . . .	4BZ

Pin 1 - Grid  
Pin 2 - Filament  
Pin 3 - Filament



Pin 4 - No Internal  
Connection  
Cap - Anode

#### Thermal:

Type of Cooling . . . . .	Convection
Temperature Rise of Condensed Mercury to Equilibrium 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. . . . .	1500 max.	volts
Inverse. . . . .	1500 max.	volts

##### PEAK NEGATIVE GRID VOLTAGE:

Before tube conduction . . . . .	500 max.	volts
During tube conduction . . . . .	10 max.	volts



# 760/6858

## CATHODE CURRENT:

Peak . . . . .	77 max.	amp
Average <sup>c</sup> . . . . .	6.4 max.	amp
Fault . . . . .	770 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 15 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.

