

Gas and Mercury-Vapor Thyatron

NEGATIVE-CONTROL TRIODE TYPE

GENERAL DATA

Electrical:

Filament, Coated:

Voltage (AC or DC) between pins

1 and 4. 2.5 volts

Current at 2.5 volts 9 ± 2 amp

Minimum heating time prior to

tube conduction. 20 sec

Direct Interelectrode Capacitances (Approx.):^a

Grid to anode. 2 $\mu\mu\text{f}$

Grid to cathode. 12 $\mu\mu\text{f}$

Ionization Time (Approx.). 10 μsec

Deionization Time (Approx.). 1000 μsec

Peak Tube Voltage Drop at anode

amperes = 8. 10 volts

Mechanical:

Operating Position Vertical, base down

Maximum Overall Length 6-1/4"

Maximum Diameter 1-5/8"

Weight (Approx.) 4 oz

Bulb T13

Cap. Medium (JEDEC No. C1-5)

Socket Small 4-Contact

Base Medium-Shell Small 4-Pin

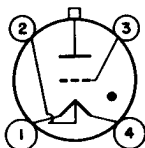
with Bayonet (JEDEC No. A4-10)

Basing Designation for BOTTOM VIEW4CF

Pin 1 - Filament

Pin 2 - Filament

Tap, Cir-
cuit Returns



Pin 3 - Grid

Pin 4 - Filament

Cap - Anode

Thermal:

Type of Cooling. Convection

Temperature Rise of Condensed Mercury to Equilibrium Above Ambient Temperature (Approx.):

No load. 25 $^{\circ}\text{C}$

Full load. 30 $^{\circ}\text{C}$

GRID-CONTROLLED-RECTIFIER SERVICE

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



710/6011

PEAK NEGATIVE GRID VOLTAGE:

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

CATHODE CURRENT:

| | | |
|--------------------------------|----------|-----|
| Peak. | 30 max. | amp |
| Average ^b | 2.5 max. | amp |
| Fault | 250 max. | amp |

CONDENSED-MERCURY TEMPERATURE

| | | |
|--|------------|----|
| RANGE (Operating) ^c | -40 to +80 | °C |
|--|------------|----|

^a Without external shield.

^b Averaged over any interval of 5 seconds maximum.

^c 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.

