



## THYRATRON

### DESCRIPTION

The FG-67 is a mercury-vapor thyratron with an intermediate control characteristic. This tube is particularly designed for use in inverter circuits where a short deionization time is required.

### TECHNICAL INFORMATION

*These data are for reference only. For design information refer to specifications.*

### GENERAL CHARACTERISTICS

Number of electrodes..... 3

#### Electrical

Cathode—Indirectly heated type

Voltage..... 5.0 volts

Current, approx..... 4.5 amperes

Heating time, typical..... 5 minutes

Peak voltage drop, typical..... 16 volts

Approximate control characteristics

|                    |     |            |
|--------------------|-----|------------|
| Anode voltage..... | 100 | 1000 volts |
|--------------------|-----|------------|

|                   |      |            |
|-------------------|------|------------|
| Grid voltage..... | +3.0 | -0.5 volts |
|-------------------|------|------------|

|  |     |                  |
|--|-----|------------------|
| Anode to grid capacitance, approx..... | 6.5 | micromicrofarads |
|--|-----|------------------|

|                              |    |              |
|------------------------------|----|--------------|
| Ionization time, approx..... | 20 | microseconds |
|------------------------------|----|--------------|

|                                |     |              |
|--------------------------------|-----|--------------|
| Deionization time, approx..... | 100 | microseconds |
|--------------------------------|-----|--------------|

  
*Electric*  
TUBE

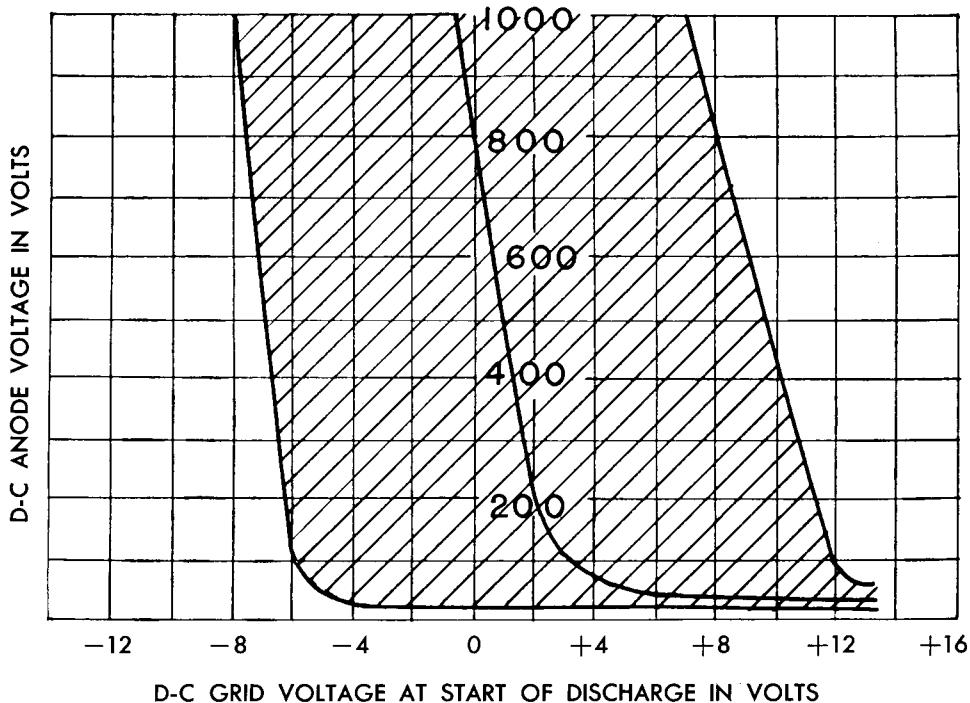
## TECHNICAL INFORMATION (CONT'D)

### Mechanical

|                              |                     |
|------------------------------|---------------------|
| Net weight, approx.....      | 4 ounces            |
| Shipping weight, approx..... | 3 pounds            |
| Mounting position.....       | vertical, base down |

### MAXIMUM RATINGS

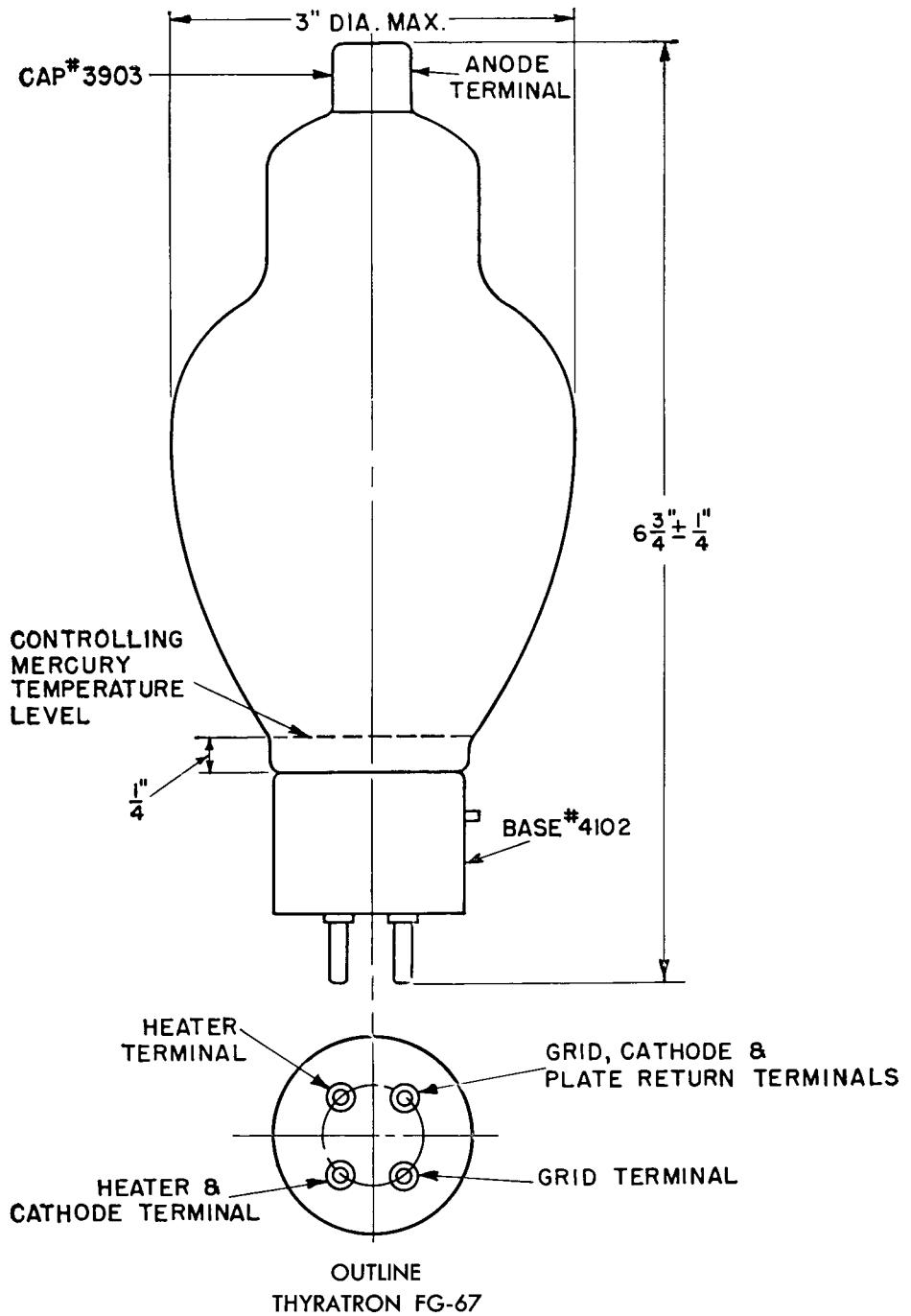
|   |                       |
|---|-----------------------|
| Maximum peak anode voltage                      |                       |
| Inverse.....                                    | 1000 volts            |
| Forward.....                                    | 1000 volts            |
| Maximum negative grid voltage                   |                       |
| Before conduction.....                          | 500 volts             |
| During conduction.....                          | 5 volts               |
| Maximum anode current                           |                       |
| Instantaneous, 25 cycles and above.....         | 15 amperes            |
| Instantaneous, below 25 cycles.....             | 5.0 amperes           |
| Average.....                                    | 2.5 amperes           |
| Surge, for design only.....                     | 200 amperes           |
| Duration of surge current.....                  | 0.1 second            |
| Maximum grid current                            |                       |
| Instantaneous.....                              | 1.0 ampere            |
| Average.....                                    | 0.25 ampere           |
| Maximum time of averaging current.....          | 15 seconds            |
| Temperature limits, condensed mercury.....      | +40 to +80 centigrade |
| Recommended temperature, condensed mercury..... | +40 centigrade        |



K-6966437

9-22-43

THYRATRON FG-67  
TYPICAL CONTROL CHARACTERISTICS  
SHADED AREA SHOWS RANGE OF CHARACTERISTICS  
CONDENSED HG TEMPERATURE 40 C



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