



## PHANOTRON

### DESCRIPTION

This half-wave, mercury-vapor rectifier is designed to withstand high peak inverse voltages and to conduct at low applied voltages. The construction minimizes the danger of bulb cracks caused by corona discharge. An edgewise-wound ribbon filament

provides a large emission reserve and improved life.

Two 866-A/866's operating in a full-wave rectifier are capable of delivering to the input of a choke-input filter a rectified voltage of 3180 volts at 0.5 ampere with good regulation.

### TECHNICAL INFORMATION

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

#### GENERAL CHARACTERISTICS

Number of electrodes . . . . . 2

##### Electrical

##### Cathode—Filamentary

|                                      |     |            |
|--------------------------------------|-----|------------|
| Filament voltage . . . . .           | 2.5 | 2.5 volts  |
| Filament current, approx. . . . .    | 5   | 5 amperes  |
| Heating time, typical . . . . .      |     | 30 seconds |
| Peak voltage drop, typical . . . . . | 15  | 15 volts   |

##### Mechanical

|                                  |                     |
|----------------------------------|---------------------|
| Type of cooling . . . . .        | convection          |
| Net weight, approx. . . . .      | 3 ounces            |
| Shipping weight, approx. . . . . | 3 pounds            |
| Mounting position . . . . .      | vertical, base down |

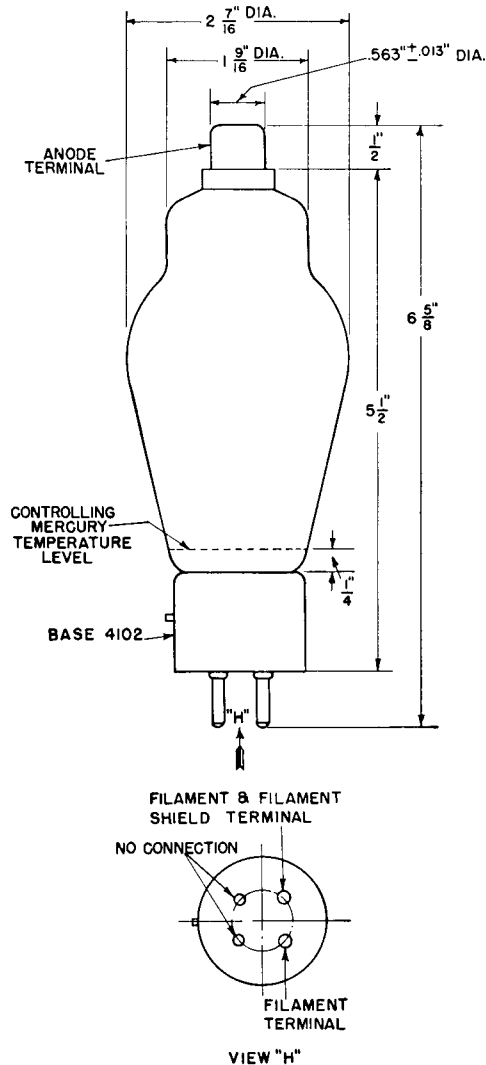
  
*Electronic*  
TUBE

**GENERAL  ELECTRIC**

# TECHNICAL INFORMATION (CONT'D)

## MAXIMUM RATINGS

|                                            |        |                  |
|--------------------------------------------|--------|------------------|
| Maximum peak inverse anode voltage         |        |                  |
| 150 cycles per second or less              | 2000   | 10,000 volts     |
| Condensed mercury temperature              | 25-70  | 25-60 centigrade |
| 1000 cycles per second or less             |        | 5,000 volts      |
| Condensed mercury temperature              |        | 25-70 centigrade |
| Maximum anode current                      |        |                  |
| Instantaneous                              | 2.0    | 1.0 amperes      |
| Average                                    | 0.5    | 0.25 amperes     |
| Recommended temperature, condensed mercury | 40 ± 5 | centigrade       |



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OUTLINE  
GL-866-A/866 PHANOTRON

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