



# PHANOTRON

## DESCRIPTION

The FG-32 is a half-wave, mercury-vapor rectifier for converting alternating current to direct current. It is adapted to applications where rectification of higher currents at lower frequencies and voltages is desired than is possible with high-

vacuum tubes. In comparison with high-vacuum tubes the FG-32 has a relatively low and constant voltage drop which is an advantage in low-voltage rectifier applications as it allows more efficient utilization of power and results in lower circuit losses.

## TECHNICAL INFORMATION

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

### GENERAL CHARACTERISTICS

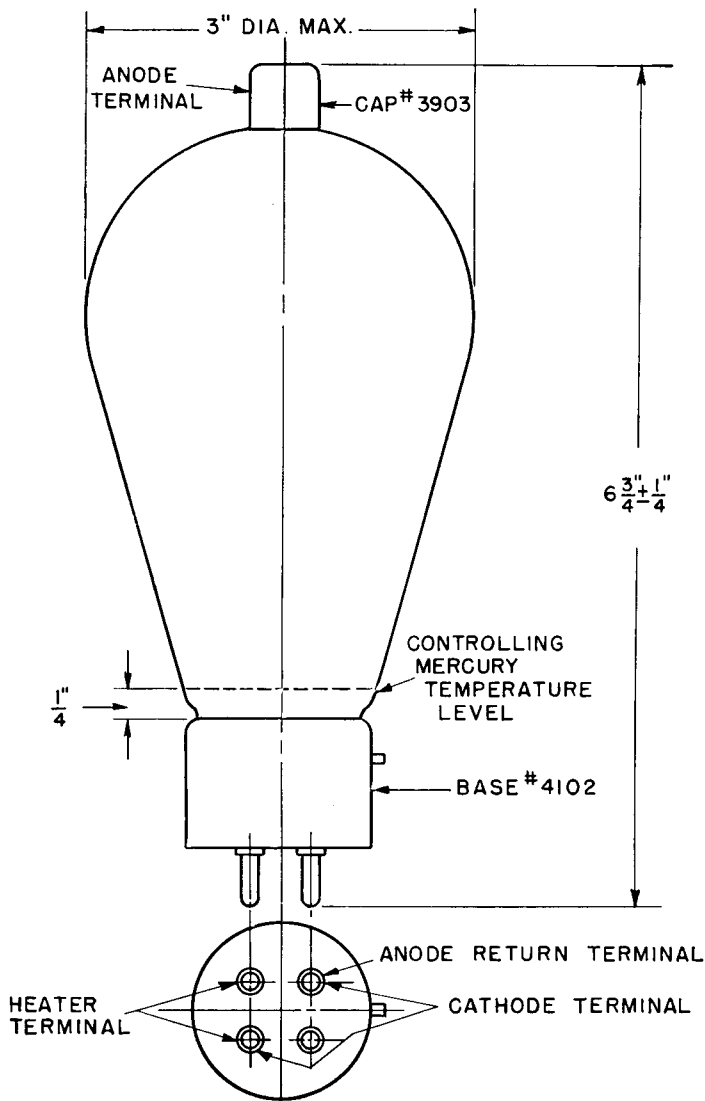
Number of electrodes . . . . .	2
<b>Electrical</b>	
Cathode—Indirectly heated type	
Heater voltage . . . . .	5.0 volts
Heater current, approx. . . . .	4.5 amperes
Heating time, typical . . . . .	5 minutes
Peak voltage drop, typical . . . . .	12 volts
<b>Mechanical</b>	
Net weight, approx. . . . .	4 ounces
Shipping weight, approx. . . . .	3 pounds
Mounting position . . . . .	vertical, base down



**TECHNICAL INFORMATION (CONT'D)**

**MAXIMUM RATINGS**

Maximum peak inverse anode voltage.....	1000	volts
Maximum anode current		
Instantaneous, 25 cycles and above.....	15	amperes
Instantaneous, below 25 cycles.....	5	amperes
Average.....	2.5	amperes
Surge, for design only.....	200	amperes
Duration of surge current.....	0.1	second
Maximum time of averaging current.....	15	seconds
Temperature limits, condensed mercury.....	+30 to +80	centigrade
Recommended temperature, condensed mercury.....	40	centigrade



OUTLINE  
 FG-32 PHANOTRON

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