# 6CA4

# Full-Wave Vacuum Rectifier

**9-PIN MINIATURE TYPE**

**GENERAL DATA**

**Electrical:**

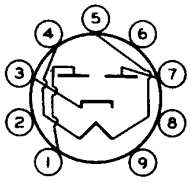
Heater, for Unipotential Cathode:

| | | |
|---|---|---|
| Voltage (AC or DC) | 6.3 | volts |
| Current | 1 | amp |

**Mechanical:**

| | |
|---|---|
| Operating Position | Any |
| Maximum Overall Length | 3-1/16" |
| Maximum Seated Length | 2-13/16" |
| Length, Base Seat to Bulb Top (Excluding tip) | 2-7/16" ± 3/32" |
| Diameter | 0.750" to 0.875" |
| Dimensional Outline | See *General Section* |
| Bulb | T6-1/2 |
| Base | Small-Button Noval 9-Pin (JEDEC No.E9-1) |
| Basing Designation for BOTTOM VIEW | 9M |

Pin 1 – Plate No.1
Pin 2 – No Connection
Pin 3 – Cathode
Pin 4 – Heater
Pin 5 – Heater




Pin 6 – No Connection
Pin 7 – Plate No.2
Pin 8 – No Connection
Pin 9 – No Connection

**FULL-WAVE RECTIFIER**

**Maximum Ratings,** *Design-Center Values:*

| | | |
|---|---|---|
| PEAK INVERSE PLATE VOLTAGE | 1000 max. | volts |
| AC PLATE SUPPLY VOLTAGE PER PLATE (RMS): | | |
| With capacitor-input to filter | 350 max. | volts |
| PEAK PLATE CURRENT PER PLATE | 450 max. | ma |
| DC OUTPUT CURRENT | 150 max. | ma |

HOT-SWITCHING TRANSIENT PLATE CURRENT PER PLATE:

Even occasional hot-switching with capacitor-input circuits permits the flow of plate current having magnitudes which can adversely affect the life and reliability of tubes. If capacitor-input circuits are to be used, protect the circuits against possible adverse effects of hot-switching by the use of a circuit arrangement which will limit the maximum peak current value per plate to a value of 1 ampere during the initial cycles of the hot-switching transient.

PEAK HEATER-CATHODE VOLTAGE:

| | | |
|---|---|---|
| Heater negative with respect to cathode | 500 max. | volts |

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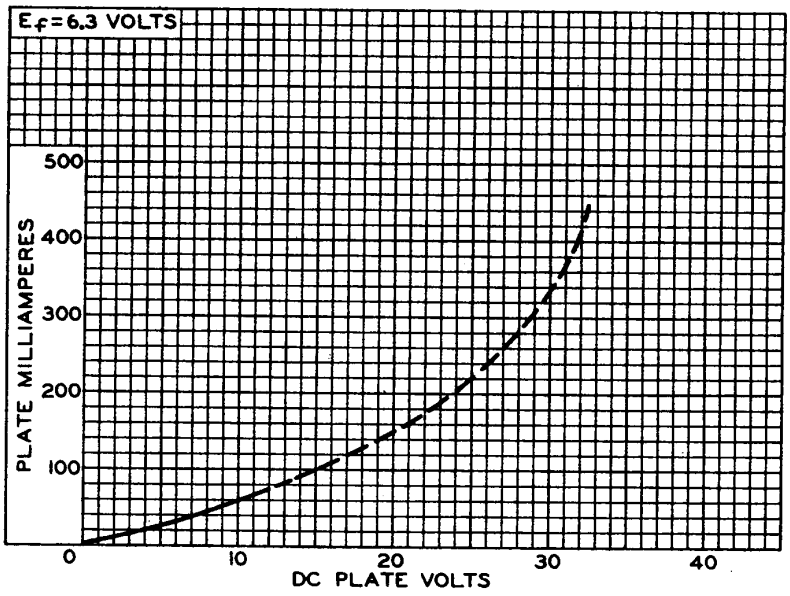
**Typical Operation:**

*With capacitor input to filter*

| | | | | |
|---|---|---|---|---|
| AC Plate-To-Plate Supply Voltage (RMS) | 500 | 600 | 700 | volts |
| Filter-Input Capacitor | 50 | 50 | 50 | μf |
| Total Effective Plate-Supply Impedance Per Plate | 150 | 200 | 240 | ohms |
| DC Output Voltage at Input to Filter (Approx.) for dc output ma. = 150 | 245 | 293 | 347 | volts |

## AVERAGE PLATE CHARACTERISTIC
### Each Unit

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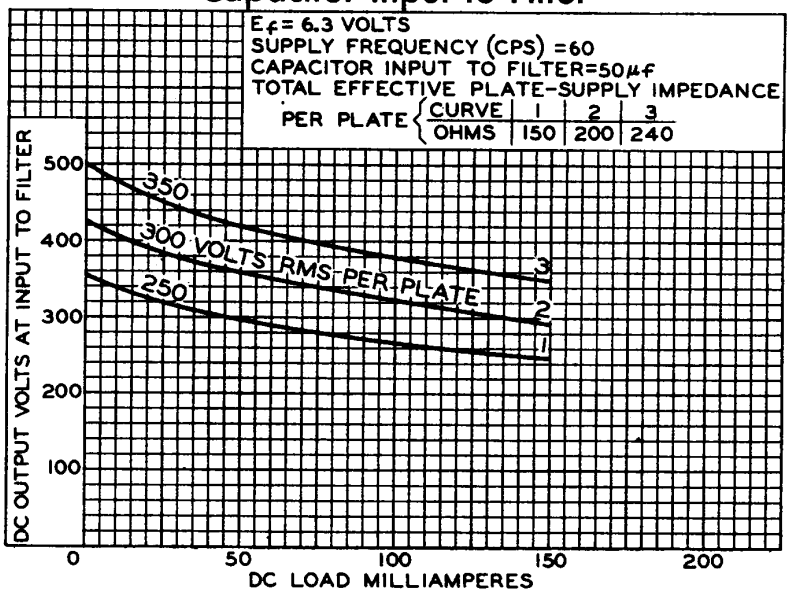
## OPERATION CHARACTERISTICS
### Capacitor Input to Filter

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