# Half-Wave Vacuum Rectifier

**NOVAR TYPE**

**For Television Damper Service**

## Electrical:

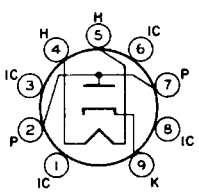
| | | |
|---|---|---|
| Heater Characteristics and Ratings: | | |
| Voltage (AC or DC) | 6.3 ± 0.6 | volts |
| Current at heater volts = 6.3 | 1.200 | amp |
| Maximum Heater-Cathode Voltage: | | |
| Heater negative with respect to cathode:[a] | | |
| Peak | 5500 | volts |
| DC component | 900 | volts |
| Heater positive with respect to cathode: | | |
| Peak | 300 | volts |
| DC component | 100 | volts |
| Direct Interelectrode Capacitances (Approx.):[b] | | |
| Plate to cathode and heater | 4.4 | pf |
| Cathode to plate and heater | 6.0 | pf |
| Heater to cathode | 1.8 | pf |

## Mechanical:

| | |
|---|---|
| Operating Position | Any |
| Type of Cathode | Coated Unipotential |
| Maximum Overall Length | 3.080" |
| Maximum Seated Length | 2.700" |
| Diameter | 1.062" to 1.188" |
| Dimensional Outline | See *General Section* |
| Bulb | T9 |

Bases (Alternates):
- Small-Button Novar 9-Pin (JEDEC No. E9-75)
- Small-Button Novar 9-Pin with Exhaust Tip (JEDEC No. E9-89)
- Basing Designation for BOTTOM VIEW . . . . . 9HP

Pin 1 – Do Not Use[c]
Pin 2 – Plate
Pin 3 – Do Not Use[c]
Pin 4 – Heater
Pin 5 – Heater
Pin 6 – Do Not Use[c]
Pin 7 – Plate
Pin 8 – Do Not Use[c]
Pin 9 – Cathode



## DAMPER SERVICE

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

*For operation in a 525-line, 30-frame system*[d]

| | | |
|---|---|---|
| Peak Inverse Plate Voltage[a] | 5000 | volts |
| Peak Plate Current | 1000 | ma |
| DC Plate Current | 165 | ma |
| Plate Dissipation | 5.3 | watts |

**Characteristics, Instantaneous Value:**

| | | |
|---|---|---|
| Tube Voltage Drop for plate ma = 250 | 32 | volts |

[a] This rating is applicable where the duration of the voltage pulse does not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.

[b] Without external shield.

[c] Socket terminals 1, 3, 6, and 8 should not be used for tie points. It is also recommended that socket clips for these pins be removed to reduce the possibility of arc-over and to minimize leakage.

[d] As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations", Federal Communications Commission.