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 ...... 6.5 pf
- Cathode to plate and heater ...... 9.0 pf
- Heater to cathode .............. 2.8 pf

Mechanical:
Operating Position ....... Any
Type of Cathode .......... Coated Unipotential
Maximum Overall Length .......... 3.005"
Seated Length .......... 2.375" to 2.625"
Diameter ........ 1.062" to 1.188"
Dimensional Outline (JEDEC 12-99) ... See General Section
Bulb ........ 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:

Peak Inverse Plate Voltage \(a\) ................ 5500 volts
Peak Plate Current .......................... 1300 ma
DC Plate Current ............................ 250 ma
Plate Dissipation ............................ 8.5 watts

Characteristics, Instantaneous Value:

Tube Voltage Drop for plate \(ma = 350 \) ........ 25 volts

\(a\) This rating is applicable when 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 as tie points. It is recommended that the 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.