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:\na
    - 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

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.