



3B2

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HALF-WAVE VACUUM RECTIFIER

GENERAL DATA

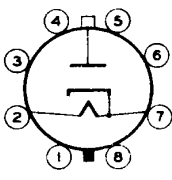
Electrical:

Heater, for Unipotential Cathode:
 Voltage 3.15 ac volts
 Current 0.22 amp
 Direct Interelectrode Capacitance (Approx.):^o
 Plate to cathode & internal shield & heater 1.8 $\mu\mu\text{f}$

Mechanical:

Mounting Position Any
 Maximum Overall Length 5-7/32"
 Seated Length 4-1/2" \pm 3/16"
 Maximum Diameter 1-23/32"
 Bulb T-12
 Cap Small (JETEC No. C1-1)
 Base Short Jumbo-Shell Octal 8-Pin
 with External Barriers (JETEC No. B8-71)
 Basing Designation for BOTTOM VIEW 8GH

Pin 1 - Internal Connection- Do Not Use
 Pin 2 - Heater
 Pin 3 - Same as Pin 1
 Pin 4 - No Connection
 Pin 5 - Same as Pin 1
 Pin 6 - Same as Pin 1
 Pin 7 - Heater, Cathode, Internal Shield
 Pin 8 - Same as Pin 1
 Cap - Plate



PULSED-RECTIFIER SERVICE

Maximum Ratings, Design-Center Values Except as Noted:
For operation in a 525-line, 30-frame system^o

INVERSE PLATE VOLTAGE:
 Total dc and peak (Absolute maximum) 35000[■] max. volts
 DC 25000 max. volts
PEAK PLATE CURRENT 80 max. ma
AVERAGE PLATE CURRENT 1.1 max. ma

- ^o Without external shield.
- [◆] See Operating Considerations.
- [□] As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations", Federal Communications Commission.
- [■] Under no circumstances should this absolute value be exceeded.

OPERATING CONSIDERATIONS

Socket Connections. Low-potential circuits should not be connected to any of the socket terminals. Any or all of the following socket terminal connections are permissible

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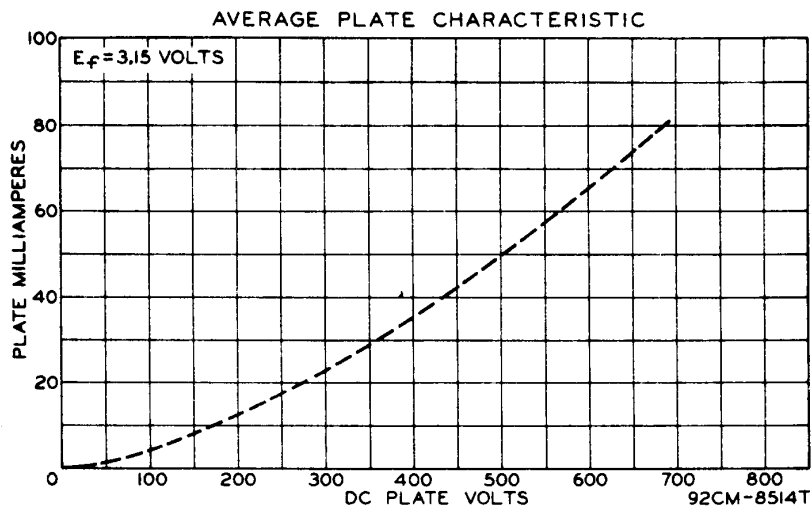
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and may aid in corona reduction.

1. Pins 1,3,5, and 7 may be connected together.
2. Pins 2,6, and 8 may be connected together.
3. Pin 4 may be connected to either pin 2 or pin 7, or may be used as a tie point for a heater-voltage dropping resistor. Do not use pin 4 as a low-potential tie point.

Measurement of Heater Voltage. To measure the heater voltage when the heater is at a high dc potential with respect to ground, it is recommended that a simple method utilizing visual comparison of the cathode and heater temperatures be used. The color temperature of the cathode and heater, with the heater operating from a pulse-power source, may be checked visually by comparing in a darkened room this color temperature with that obtained when the heater of another 3B2 is operated from a dc or low-frequency ac supply of 3.15 volts.

X-rays. The voltages employed in some television receivers and other high-voltage equipment are sufficiently high that high-voltage rectifier tubes may produce X-rays which can constitute a health hazard unless such tubes are adequately shielded. Relatively simple shielding should prove adequate, but the need for this precaution should be considered in equipment design.



JULY 1, 1955

TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

TENTATIVE DATA