



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.):^oPlate 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

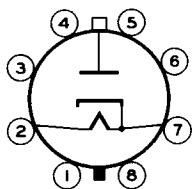
Pin 2 - Heater

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
ShieldPin 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[□]***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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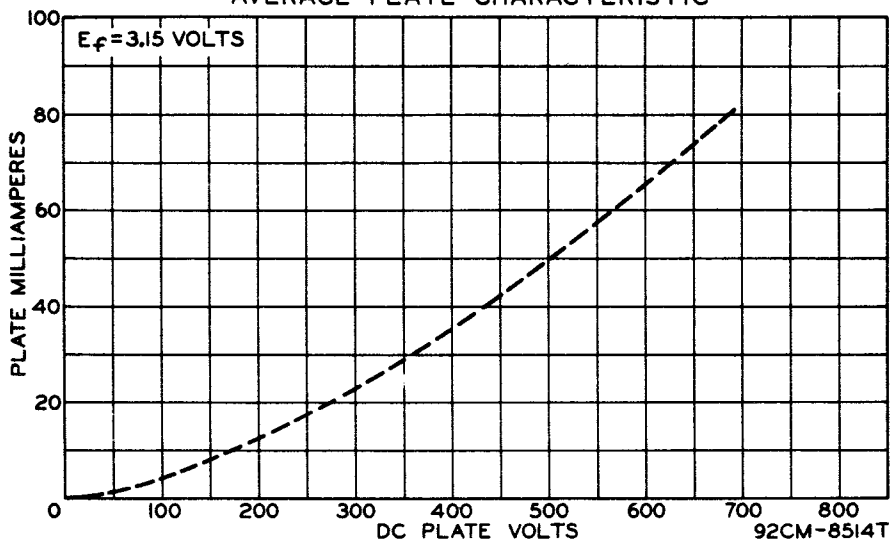
and may aid in corona reduction.

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.

AVERAGE PLATE CHARACTERISTIC



JULY 1, 1955

TUBE DIVISION

TENTATIVE DATA

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY