The 2AV2 is a miniature filamentary diode designed for use in television receivers as the high-voltage rectifier in flyback types of power supplies.

**GENERAL**

**ELECTRICAL**
- Cathode - Coated Filament
- Filament Characteristics and Ratings
  - Filament Voltage, AC or DC* .... 1.8±0.27 Volts
  - Filament Current+ .......... 0.225 Amperes
  - Direct Interelectrode Capacitances, approximate$ - Plate to Filament (p to f) .... 0.8 pf

**MECHANICAL**
- Operating Position - Any
- Envelope - T-6 1/2, Glass
- Base - E9-1, Small Button 9-Pin
- Outline Drawing - EIA 6-2
  - Maximum Diameter ........ 0.875 Inches
  - Minimum Diameter ........ 0.750 Inches
  - Maximum Over-all Length ... 2.187 Inches
  - Maximum Seated Height ..... 1.937 Inches

**MAXIMUM RATINGS**

**FLYBACK RECTIFIER SERVICE®**
**DESIGN-MAXIMUM VALUES UNLESS OTHERWISE INDICATED**

<table>
<thead>
<tr>
<th>Component</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Inverse Plate Voltage DC</td>
<td>7000 Volts</td>
</tr>
<tr>
<td>Total DC and Peak (Absolute-Maximum Value)</td>
<td>8250 Volts</td>
</tr>
<tr>
<td>Steady-State Peak Plate Current DC Output Current</td>
<td>50 Milliamperes</td>
</tr>
<tr>
<td></td>
<td>0.6 Milliamperes</td>
</tr>
</tbody>
</table>

Design-Maximum ratings are limiting values of operating and environmental conditions applicable to a bogy electron tube of a specified type as defined by its published data and should not be exceeded under the worst probable conditions.

The tube manufacturer chooses these values to provide acceptable serviceability of the tube, making allowance for the effects of changes in operating conditions due to variations in the characteristics of the tube under consideration.

The equipment manufacturer should design so that initially and throughout life no design-maximum value for the intended service is exceeded with a bogy tube under the worst probable operating conditions with respect to supply-voltage variation, equipment component variation, equipment control adjustment, load variation, signal variation, environmental conditions, and variations in the characteristics of all other electron devices in the equipment.

**PHYSICAL DIMENSIONS**

**TERMINAL CONNECTIONS**
- Pin 1 - Plate
- Pin 2 - Internal Connection - Do Not Use
- Pin 3 - Internal Connection - Do Not Use
- Pin 4 - Filament
- Pin 5 - Filament
- Pin 6 - Internal Connection - Do Not Use
- Pin 7 - Internal Connection - Do Not Use
- Pin 8 - Internal Connection - Do Not Use
- Pin 9 - Plate

**BASING DIAGRAM**

EIA 9U
AVERAGE CHARACTERISTICS

Tube Voltage Drop, approximate
Ib = 1.0 Milliamperes . . . . . . . . . . . . . . . . . . . . . . . . . . . . 20 Volts

NOTES

* The equipment designer should design the equipment so that heater voltage is centered at the specified bogey value, with heater supply variations restricted to maintain heater voltage within the specified tolerance.

† Heater current of a bogey tube at Ef = 1.8 volts.

§ Without external shield.

¶ For operation in a 525-line, 30-frame television system as described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations", Federal Communications Commission. The duty cycle of the voltage pulse must not exceed 15 percent of one scanning cycle.

# Socket terminals 2, 3, 6, 7, and 8 should not be used as tie points for external-circuit components.

The tubes and arrangements disclosed herein may be covered by patents of General Electric Company or others. Neither the disclosure of any information herein nor the sale of tubes by General Electric Company conveys any license under patent claims covering combinations of tubes with other devices or elements. In the absence of an express written agreement to the contrary, General Electric Company assumes no liability for patent infringement arising out of any use of the tubes with other devices or elements by any purchaser of tubes or others.

TUBE DEPARTMENT
GENERAL ELECTRIC
Owensboro, Kentucky