Diode

2AV2

FOR TV HIGH-VOLTAGE RECTIFIER APPLICATIONS

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

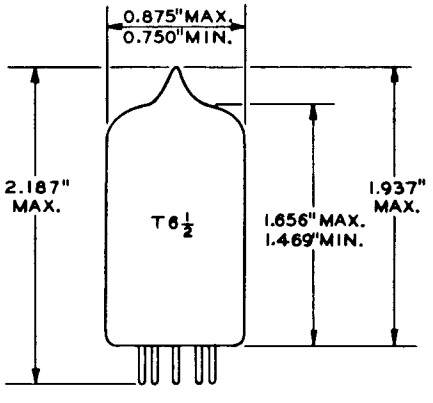
Peak Inverse Plate Voltage		
DC Component	7000	Volts
Total DC and Peak (Absolute-Maximum Value)	8250	Volts
Steady-State Peak Plate Current	50	Milliamperes
DC Output Current	0.6	Milliamperes

Design-Maximum ratings are limiting values of operating and environmental conditions applicable to a bogey 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 bogey 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

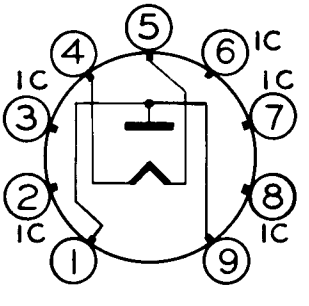


EIA 6-2

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.

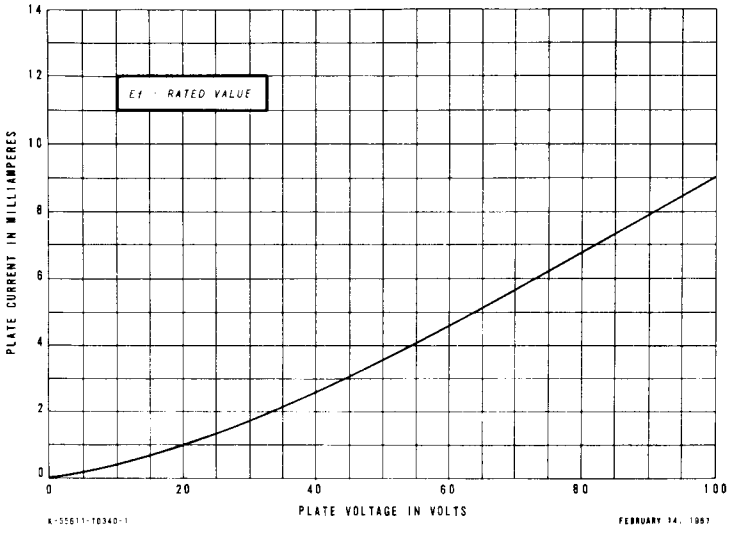
‡ Heater current of a bogey tube at Ef = 1.8 volts.

§ 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.

AVERAGE PLATE CHARACTERISTICS



TUBE DEPARTMENT
GENERAL ELECTRIC
Owensboro, Kentucky