

## DESCRIPTION AND RATING

The 36AM3 is a miniature half-wave rectifier designed for use in line-operated equipment having series-connected, 100-milliamperere heaters. The heater is tapped to allow a portion of it to be used as a current-limiting resistor.

### GENERAL

#### ELECTRICAL

Cathode—Coated Unipotential

Heater Voltage\*

Between Pins 3 and 4 . . . . .  $36 \pm 10\%$  Volts

Between Pins 3 and 6 . . . . .  $32 \pm 10\%$  Volts

Heater Current . . . . . 0.1 Amperes

#### MECHANICAL

Mounting Position—Any

Envelope—T-5½, Glass

Base—E7-1, Miniature Button 7-Pin

### MAXIMUM RATINGS

#### RECTIFIER SERVICE—DESIGN-MAXIMUM VALUES

Peak Inverse Plate Voltage . . . . . 365 Volts

Steady-State Peak Plate Current . . . . . 530 Milliamperes

DC Output Current . . . . . 82 Milliamperes

Heater Cathode Voltage

Heater Positive with Respect to Cathode

DC Component . . . . . 100 Volts

Total DC and Peak . . . . . 200 Volts

Heater Negative with Respect to Cathode

DC Component . . . . . 350 Volts

Total DC and Peak . . . . . 350 Volts

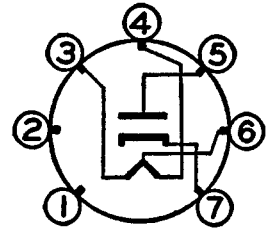
Design-Maximum ratings are limiting values of operating and environmental conditions applicable to a bogey tube of a specified type as defined by its published data, and should not be exceeded under the worst probable conditions.

These values are chosen by the tube manufacturer to provide acceptable serviceability of the tube, taking responsibility 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, variation in characteristics of all other tubes in the equipment, equipment control adjustment, load variation, signal variation, and environmental conditions.

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.

### BASING DIAGRAM

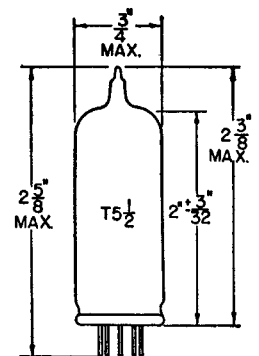


EIA 5BQ

### TERMINAL CONNECTIONS

- Pin 1—No Connection
- Pin 2—No Connection
- Pin 3—Heater
- Pin 4—Heater
- Pin 5—Plate
- Pin 6—Heater Tap
- Pin 7—Cathode

### PHYSICAL DIMENSIONS



EIA 5-3

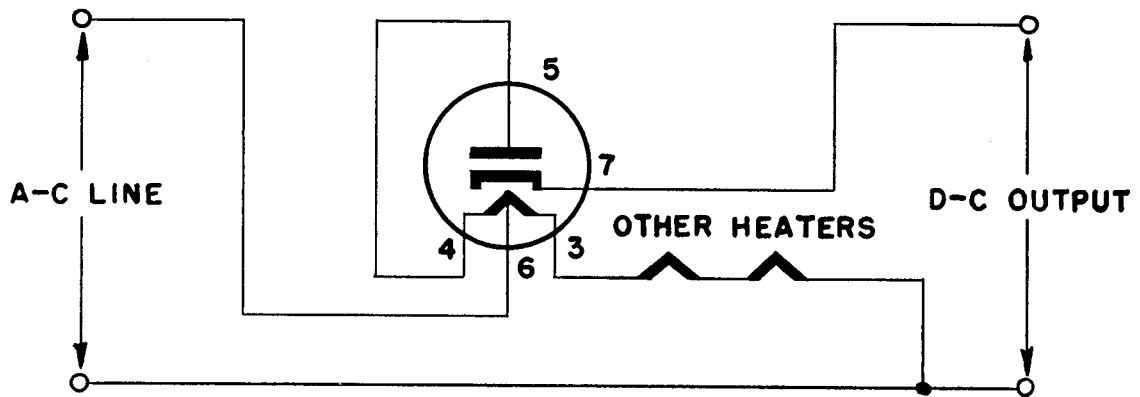
**CHARACTERISTICS AND TYPICAL OPERATION**

**HALF-WAVE RECTIFIER WITH CAPACITOR-INPUT FILTER**

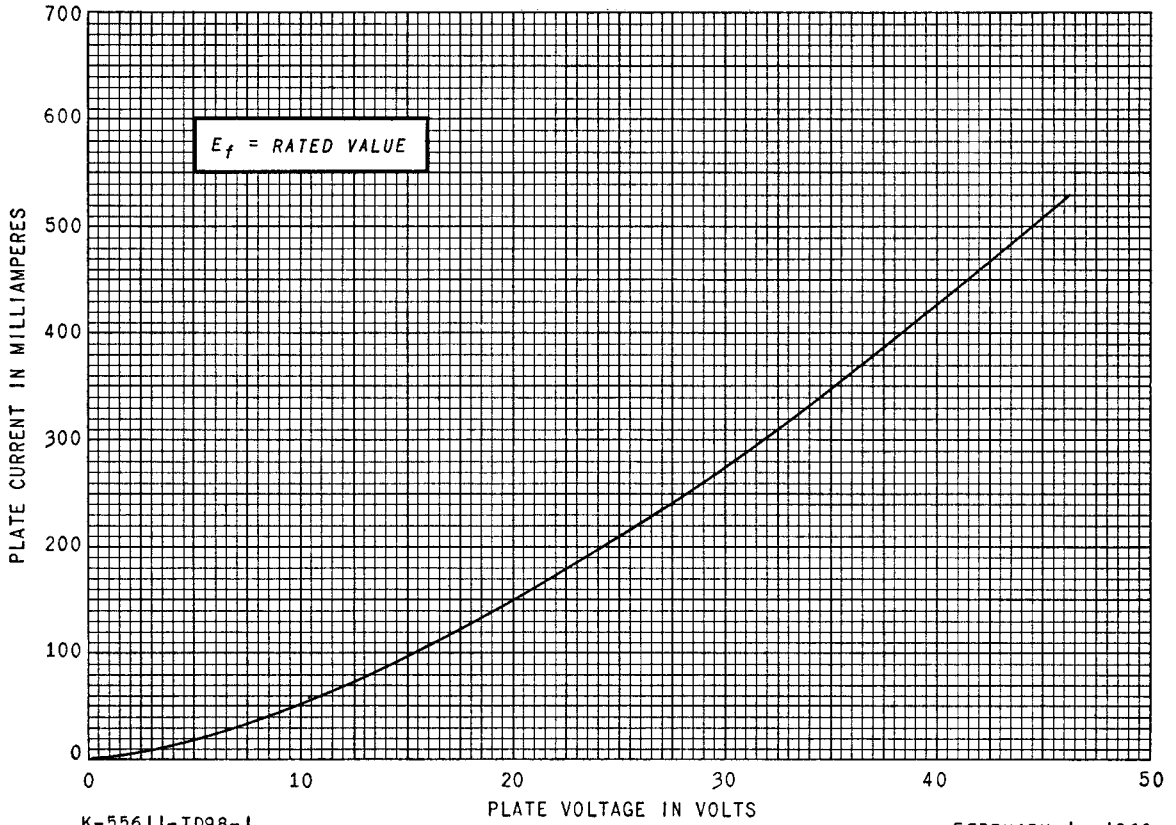
AC Plate-Supply Voltage, RMS . . . . .	117	Volts
Filter Input Capacitor . . . . .	40	Microfarads
Total Plate-Supply Resistance †		
DC Output Current . . . . .	75	Milliamperes
DC Output Voltage at Filter Input . . . . .	105	Volts
Tube Voltage Drop		
I <sub>b</sub> = 150 Milliamperes DC . . . . .	20	Volts

\* The heater tap is provided to allow a portion of the heater to be used as a current-limiting resistor (See schematic). It is not intended for panel-lamp operation.

† The portion of the heater between pins 4 and 6 has an approximate resistance 45 ohms when the output current of the rectifier is 82 milliamperes.



### AVERAGE PLATE CHARACTERISTICS



K-55611-TD98-1

FEBRUARY 1, 1960