

DESCRIPTION AND RATING

The 6AB4 is a miniature triode designed for use as a grounded-grid radio-frequency amplifier, frequency converter, or oscillator at frequencies below approximately 300 megacycles.

GENERAL

ELECTRICAL

Cathode—Coated Unipotential
 Heater Voltage, AC or DC..... 6.3 Volts
 Heater Current..... 0.15 Amperes
 Direct Interelectrode Capacitances

MECHANICAL

Mounting Position—Any
 Envelope—T-5½, Glass
 Base—E7-1, Miniature Button 7-Pin

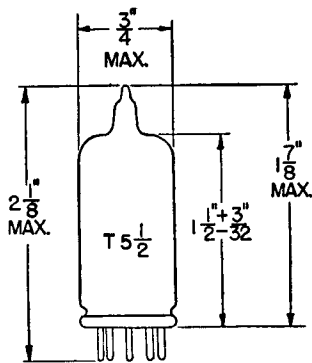
| | With Shield* | Without Shield |
|---------------------------------------|--------------|----------------|
| Grid to Plate: (g to p)..... | 1.5 | 1.5 pf |
| Input: g to (h+k)..... | 2.2 | 2.2 pf |
| Output: p to (h+k)..... | 1.4 | 0.5 pf |
| Heater to Cathode: (h to k)..... | 2.9 | 2.9 pf |
| Plate to Cathode: (p to k)..... | 0.20 | 0.24 pf |
| Grounded-Grid Input: k to (h+g)..... | 5.2 | 5.0 pf |
| Grounded-Grid Output: p to (h+g)..... | 2.6 | 1.7 pf |

MAXIMUM RATINGS

DESIGN-CENTER VALUES

| | |
|--|---|
| Plate Voltage..... 300 Volts | Heater-Cathode Voltage |
| Negative DC Grid Voltage..... 50 Volts | Heater Positive with Respect to Cathode... 90 Volts |
| Plate Dissipation..... 2.5 Watts | Heater Negative with Respect to Cathode. 90 Volts |

PHYSICAL DIMENSIONS

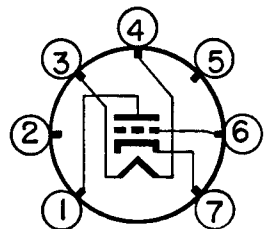


EIA 5-2

TERMINAL CONNECTIONS

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

BASING DIAGRAM



EIA 5CE

CHARACTERISTICS AND TYPICAL OPERATION

CLASS A₁ AMPLIFIER

| | | | |
|---------------------------------------|-------|-------|--------------|
| Plate Voltage..... | 100 | 250 | Volts |
| Cathode-Bias Resistor..... | 270 | 200 | Ohms |
| Amplification Factor..... | 60 | 60 | |
| Plate Resistance, approximate..... | 15000 | 10900 | Ohms |
| Transconductance..... | 4000 | 5500 | Micromhos |
| Plate Current..... | 3.7 | 10 | Milliamperes |
| Grid Voltage, approximate | | | |
| I _b = 10 Microamperes..... | -5 | -12 | Volts |

* With external shield (EIA 316) connected to pin 7.

Design-Center 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 normal conditions.

The tube manufacturer chooses these values to provide acceptable serviceability of the tube in average applications, making allowance for normal changes in operating conditions due to rated supply-voltage variation, equipment

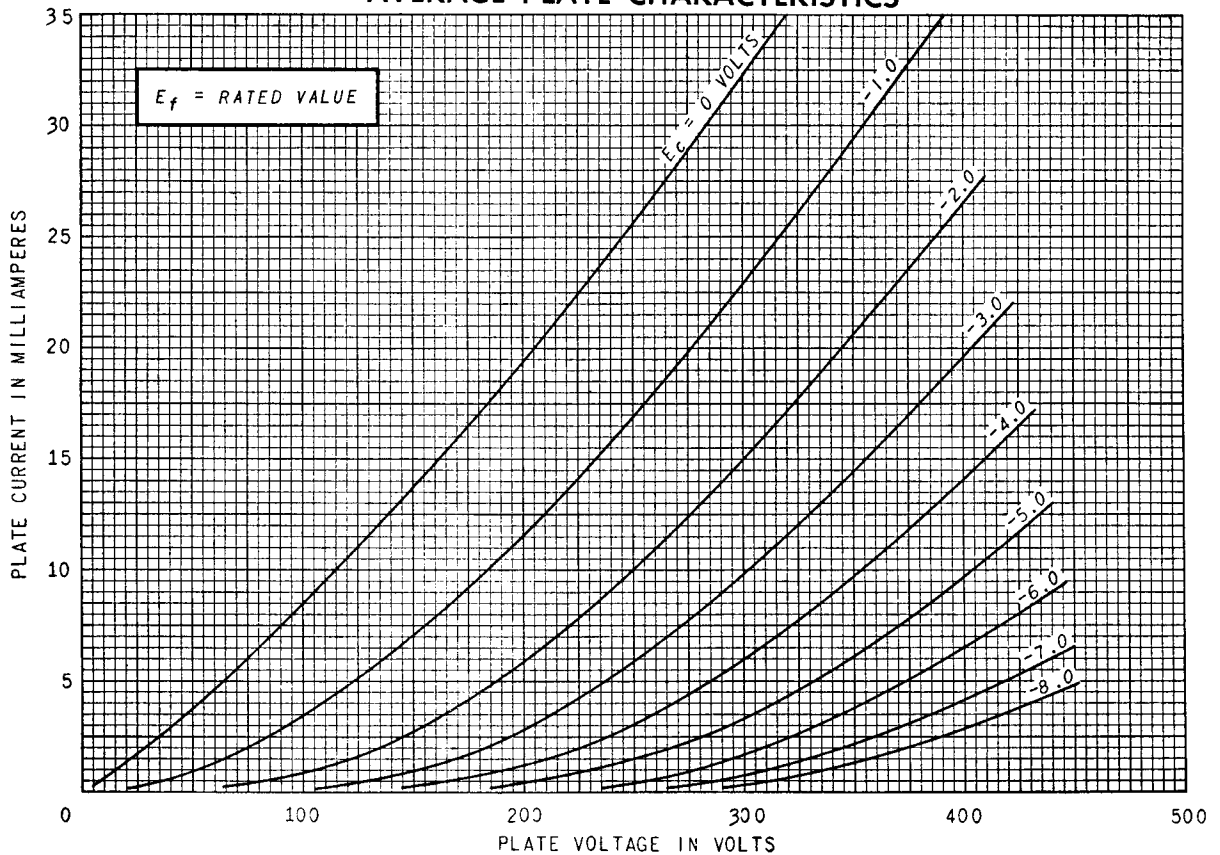
component variation, equipment control adjustment, load variation, signal variation, environmental conditions, and variations in the characteristics of the tube under consideration and of all other electron devices in the equipment.

The equipment manufacturer should design so that initially no design-center value for the intended service is exceeded with a bogey tube under normal operating conditions at the stated normal supply voltage.

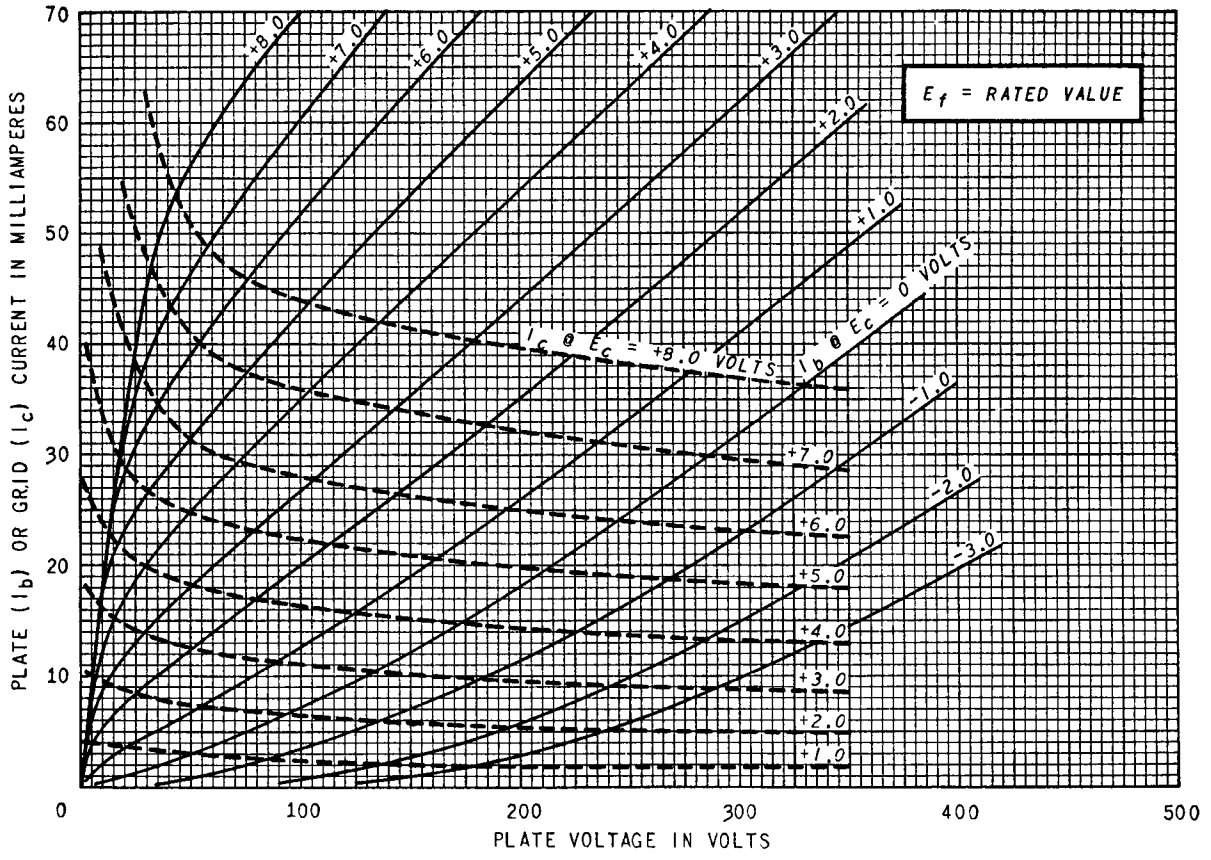
The tubes and arrangements disclosed herein may be covered by patents of General Electric Company or others. Neither the disclosure of any information herein nor the sale of tubes by General Electric Company conveys any license under patent claims covering combinations of tubes with other devices or

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.

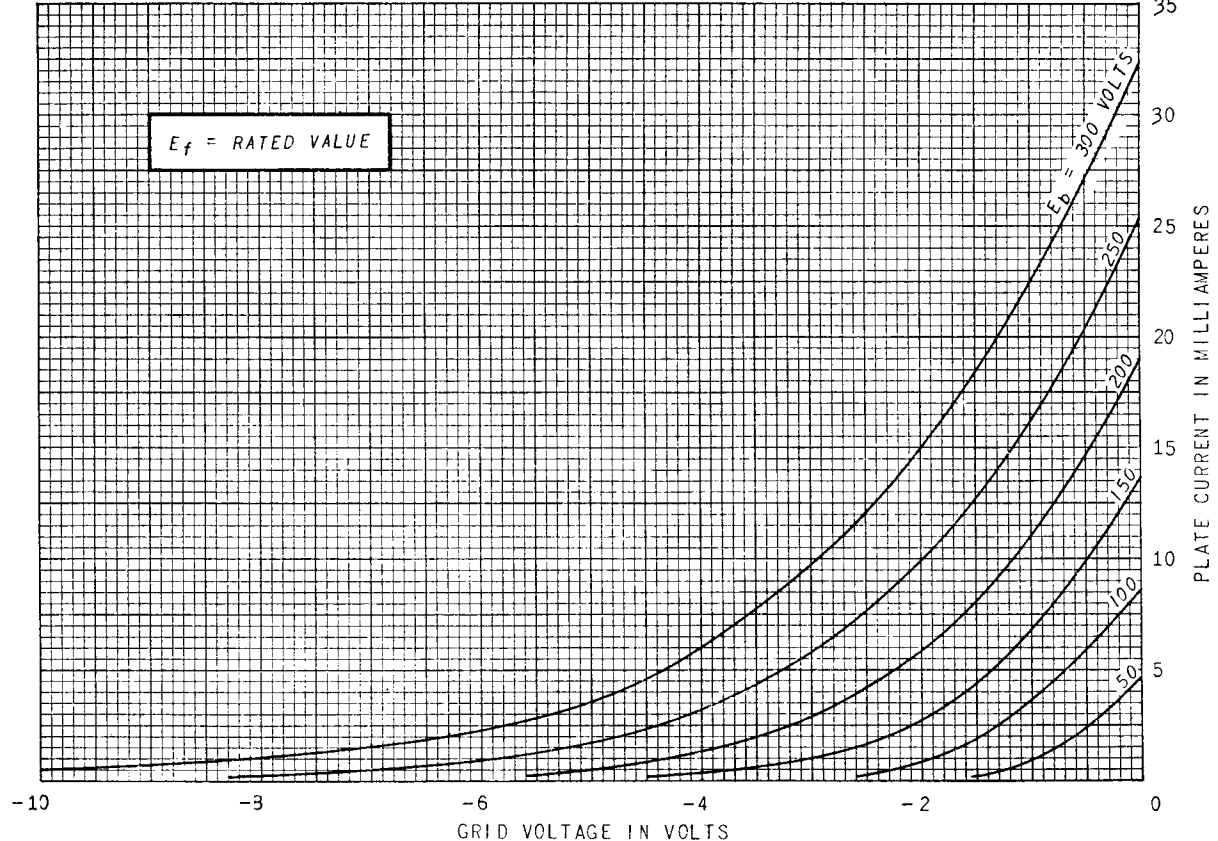
AVERAGE PLATE CHARACTERISTICS



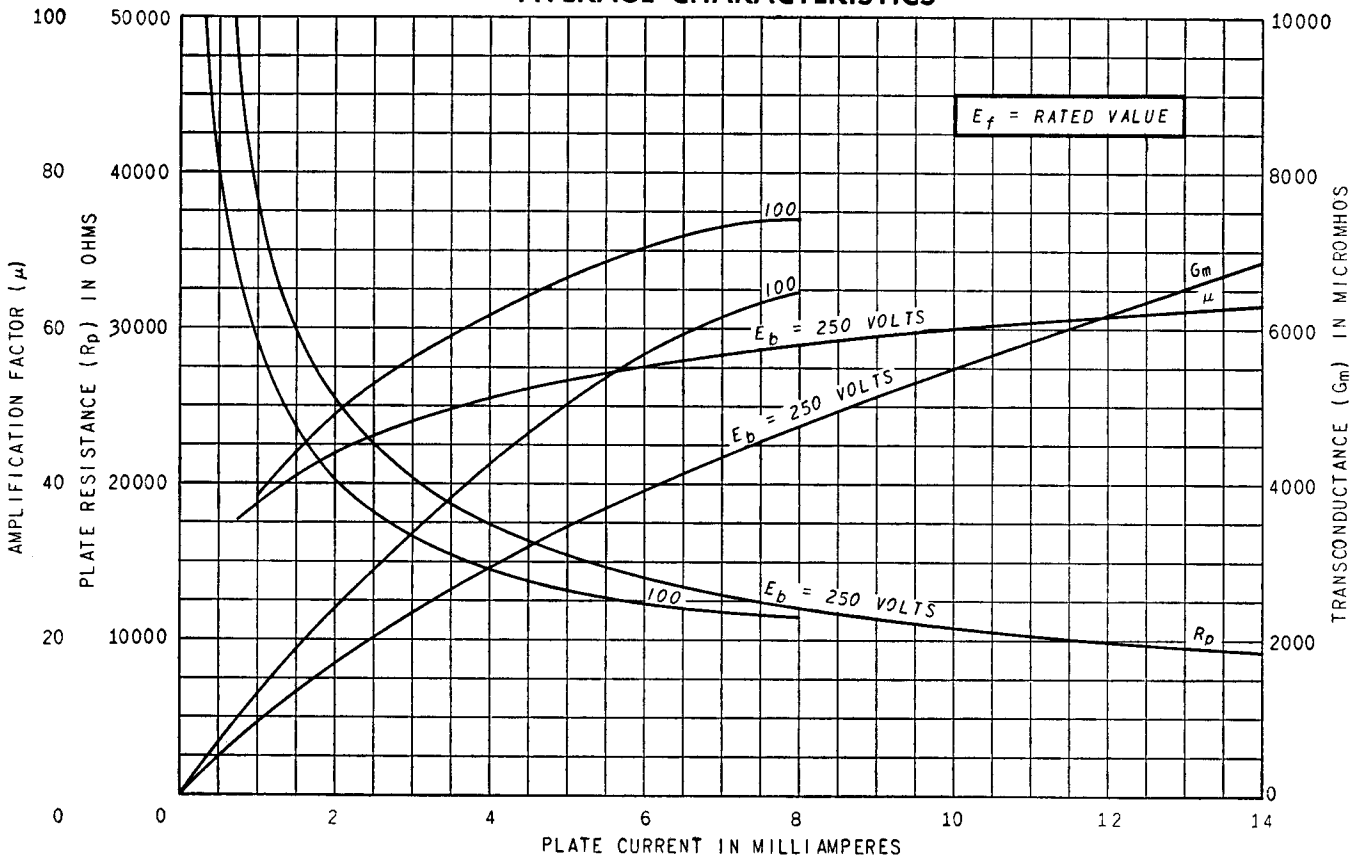
AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



AVERAGE CHARACTERISTICS



RECEIVING TUBE DEPARTMENT



Owensboro, Kentucky