



# Penta Laboratories, Inc.

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## 6C33C-B

### Power Triode

The 6C33C-B is a power triode designed for use as a series voltage regulator. The 6C33C-B has very high perveance and very high transconductance. It has high current capabilities, making it suitable for Output Transformerless audio power amplifiers.

### General Data

#### Heater Characteristics

Heater voltage.....6.3 or 12.6 ac or dc  
Heater current.....6.4 or 3.3 amps

#### Direct Interelectrode Capacitances

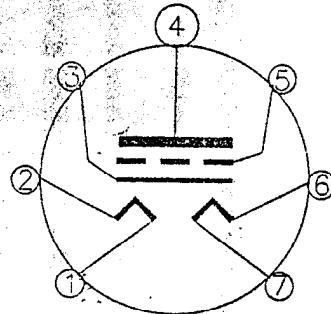
Input.....30.0 pf  
Output.....10.5 pf  
Transfer.....31.0 pf

#### Mechanical Data

Mounting position.....Vertical  
Overall length.....5.25" (max)  
Seated height.....4.75" (max)  
Diameter.....2.5" (avg)  
Base.....Septar

#### Pin Arrangement

Pin 1...Heater  
Pin 2...Heater  
Pin 3...Cathode  
Pin 4...Anode  
Pin 5...Grid 1  
Pin 6...Heater  
Pin 7...Heater



### Absolute Maximum Ratings

Anode voltage.....400  
Anode dissipation.....60 watts  
Cathode current.....600 milliamps  
Heater to cathode.....+-300 volts  
Maximum grid 1 resistance.....200,000 ohms

### Typical Characteristics

Anode voltage.....120  
Cathode resistor.....35 ohms  
Anode current.....550 milliamps  
Transconductance (Gm).....40000 micromhos  
Anode resistance.....80 ohms

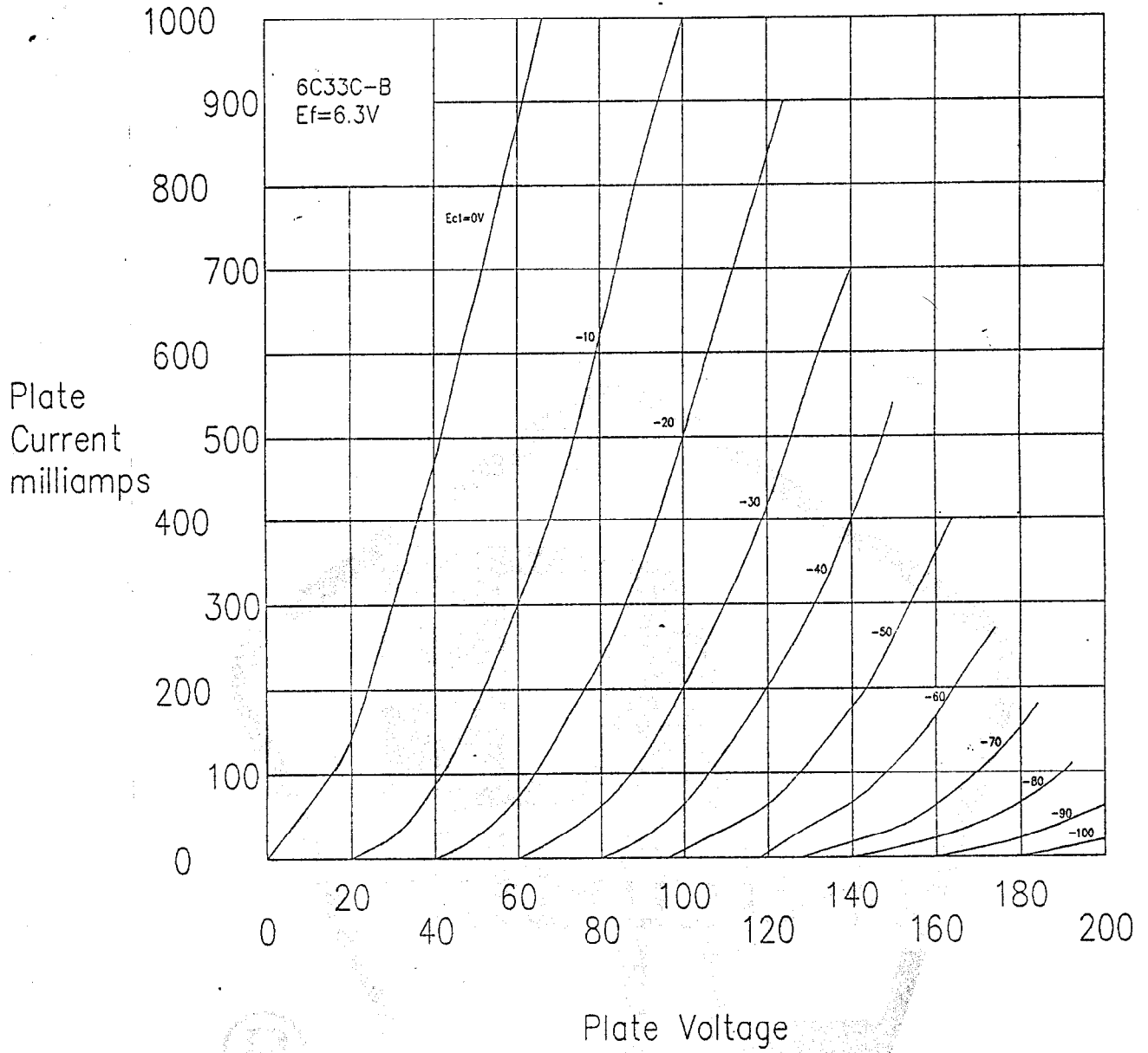
### Typical Operation

#### Audio Frequency Power Amplifier

##### Push-Pull Class A Fixed Bias

Values are for Two Tubes

Anode voltage.....200  
Grid 1 voltage.....-65  
Zero signal anode current.....480 milliamps  
Maximum signal anode current.....480 milliamps  
Peak grid 1 voltage.....65  
Zero signal anode dissipation.....96 watts  
Maximum signal anode dissipation.....40 watts  
Effective load.....800 ohms  
Power output.....55 watts



6C33C

