



35L6-GT

BEAM PENTODE

DESCRIPTION AND RATING

The 35L6-GT is a beam pentode primarily designed for use in the audio frequency power output stage of radio receivers. Features include high power sensitivity and high efficiency at relatively low plate and screen voltages.

GENERAL

ELECTRICAL

Cathode—Coated Unipotential
 Heater Voltage, AC or DC 35.0 Volts
 Heater Current 0.15 Amperes

MECHANICAL

Mounting Position—Any
 Envelope—T-9, Glass
 Base—B6-81 or B7-7, Intermediate-Shell Octal 6- or 7-Pin
 or B6-84 or B7-47, Short Intermediate-Shell Octal 6- or 7-Pin

MAXIMUM RATINGS

DESIGN-CENTER VALUES

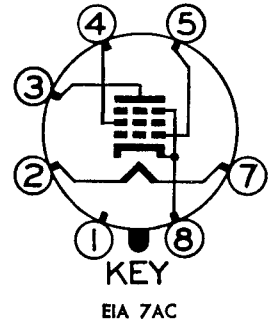
| | | |
|---|-----|---------|
| Plate Voltage | 200 | Volts |
| Screen Voltage | 125 | Volts |
| Plate Dissipation | 8.5 | Watts |
| Screen Dissipation | 1.0 | Watts |
| Heater-Cathode Voltage | | |
| Heater Positive with Respect to Cathode | 90 | Volts |
| Heater Negative with Respect to Cathode | 90 | Volts |
| Grid-Number 1 Circuit Resistance | | |
| With Fixed Bias | 0.1 | Megohms |
| With Cathode Bias | 0.5 | Megohms |

CHARACTERISTICS AND TYPICAL OPERATION

CLASS A₁ AMPLIFIER

| | | | |
|--|-------|-------|--------------|
| Plate Voltage | 110 | 200 | Volts |
| Screen Voltage | 110 | 125 | Volts |
| Grid-Number 1 Voltage | -7.5 | | Volts |
| Cathode-Bias Resistor | | 180 | Ohms |
| Peak AF Grid-Number 1 Voltage | 7.5 | 8.0 | Volts |
| Plate Resistance, approximate | 14000 | 34000 | Ohms |
| Transconductance | 5800 | 6100 | Micromhos |
| Zero-Signal Plate Current | 40 | 43 | Milliamperes |
| Maximum-Signal Plate Current | 41 | 43 | Milliamperes |
| Zero-Signal Screen Current | 3.0 | 2.0 | Milliamperes |
| Maximum-Signal Screen Current | 7.0 | 5.5 | Milliamperes |
| Load Resistance | 2500 | 5000 | Ohms |
| Total Harmonic Distortion, approximate | 10 | 10 | Percent |
| Maximum-Signal Power Output | 1.5 | 3.0 | Watts |

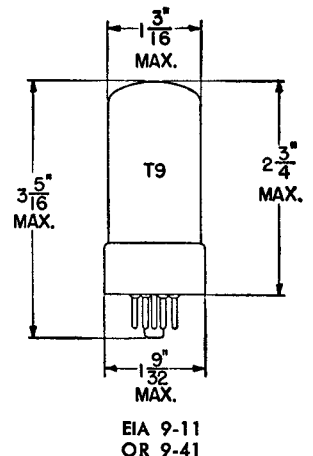
BASING DIAGRAM



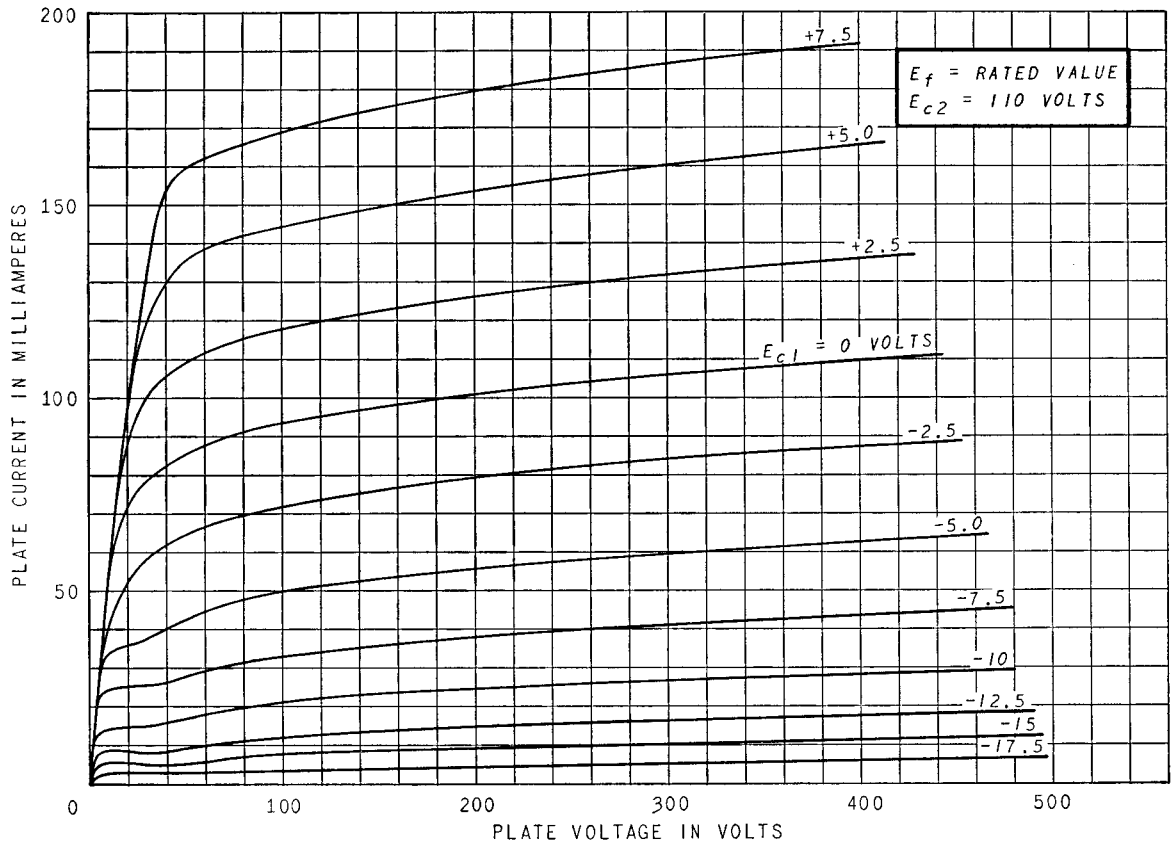
TERMINAL CONNECTIONS

- Pin 1—No Connection
 - Pin 2—Heater
 - Pin 3—Plate
 - Pin 4—Grid Number 2 (Screen)
 - Pin 5—Grid Number 1
 - Pin 7—Heater
 - Pin 8—Cathode and Beam Plates
- Note: Pin 1 omitted on bases B6-81 and B6-84

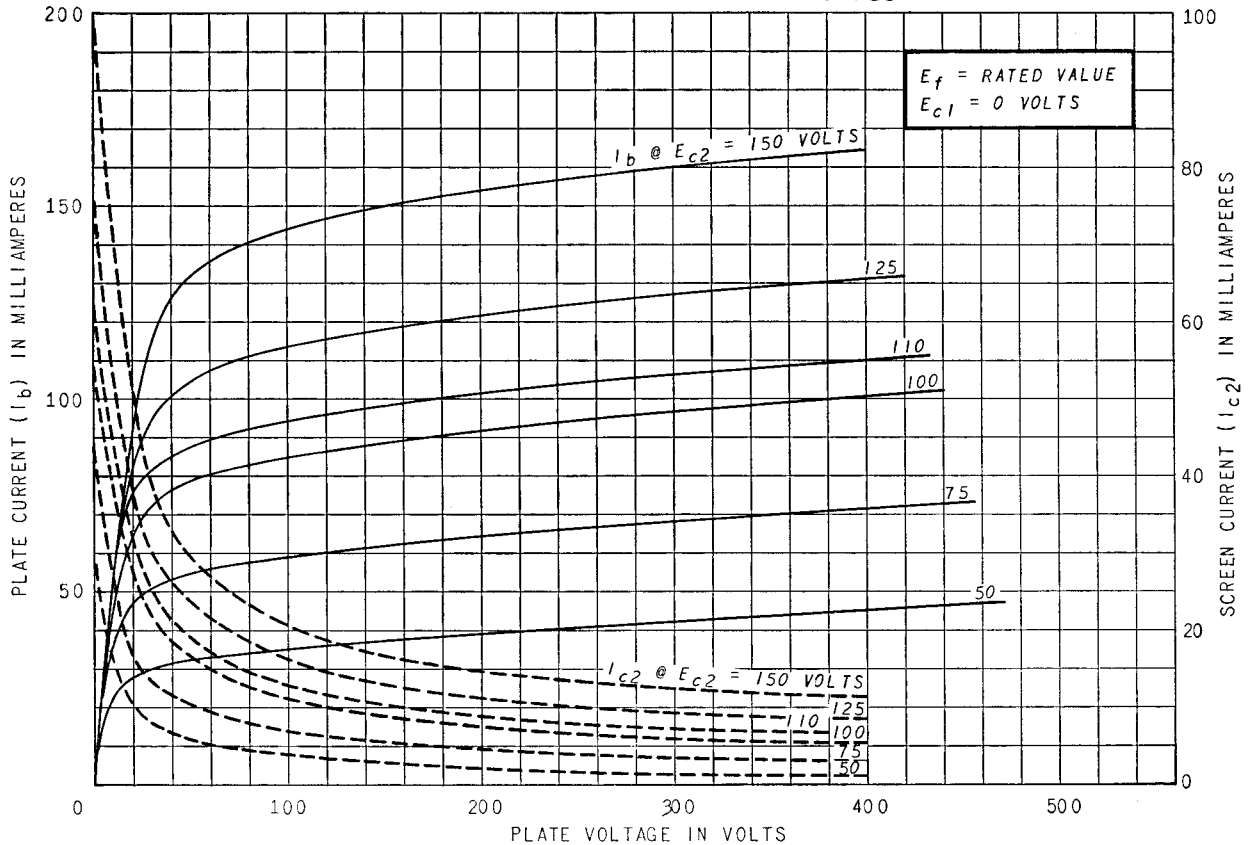
PHYSICAL DIMENSIONS



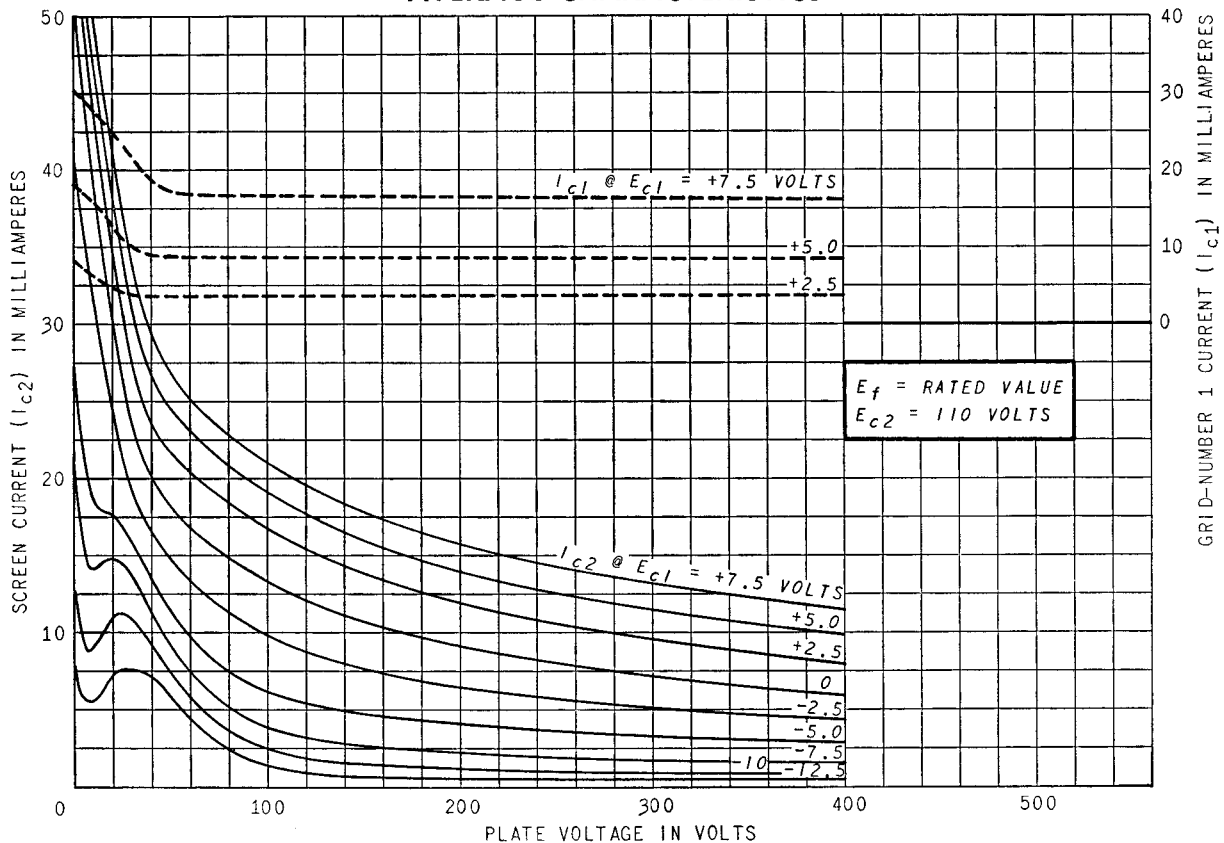
AVERAGE PLATE CHARACTERISTICS



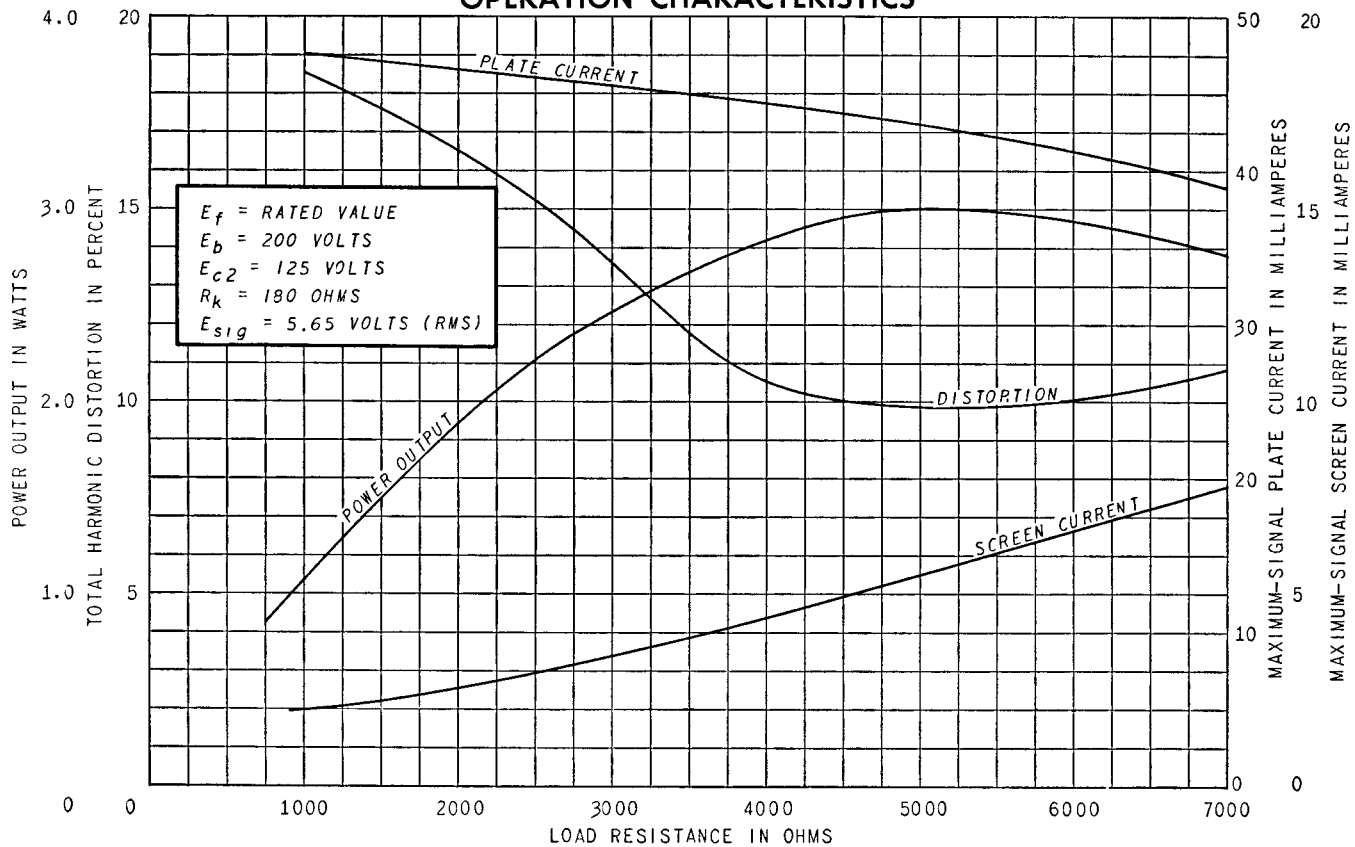
AVERAGE PLATE CHARACTERISTICS



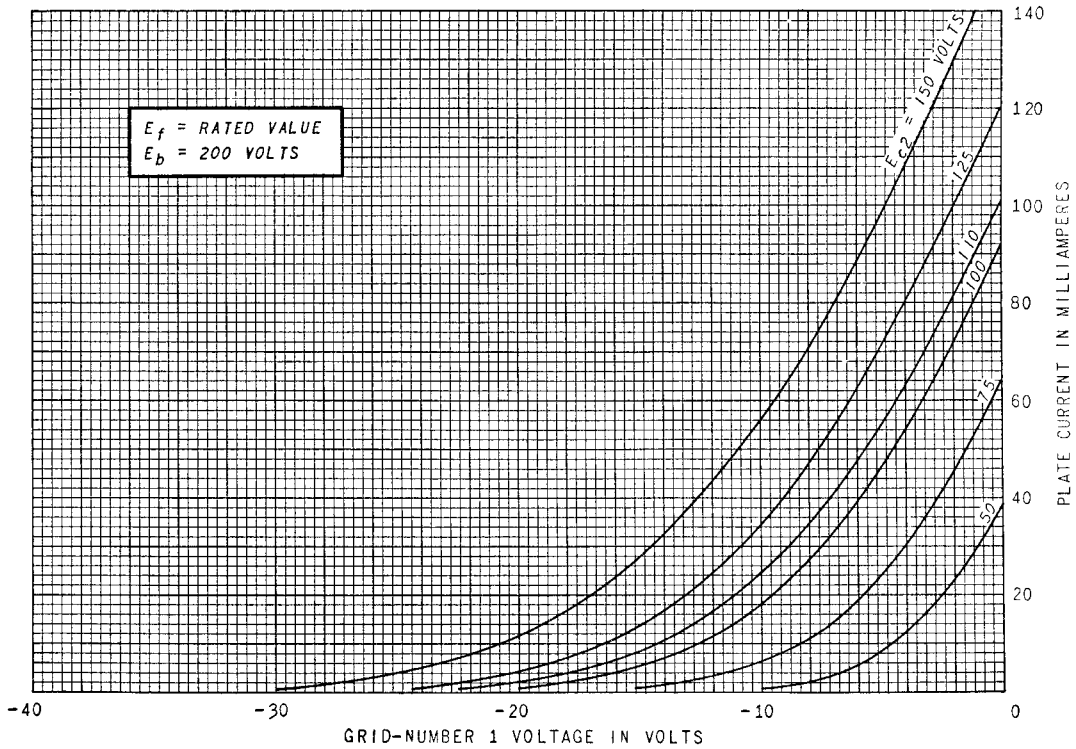
AVERAGE CHARACTERISTICS



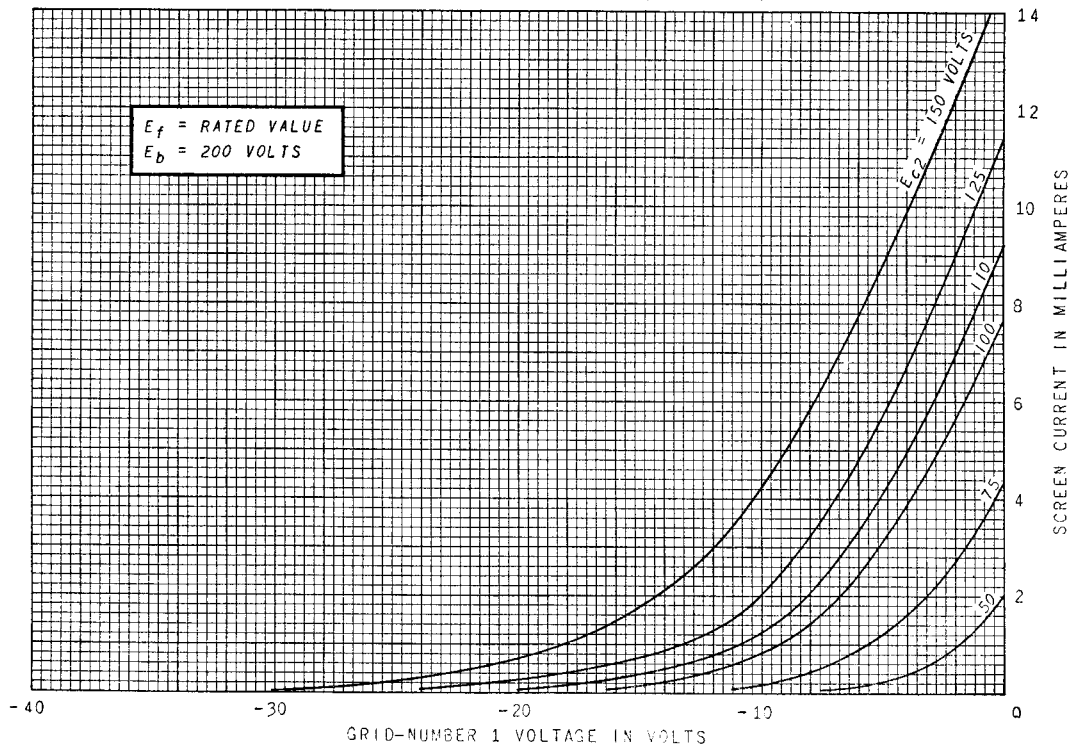
OPERATION CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



ELECTRONIC COMPONENTS DIVISION



Schenectady 5, N. Y.