

BEAM PENTODE

DESCRIPTION AND RATING

The 6AS5 is a miniature beam pentode designed primarily for use in the audio-frequency power output stage of automobile receivers. The tube is capable of delivering a relatively high power output at low plate and screen voltages.

GENERAL

ELECTRICAL

Cathode—Coated Unipotential

Heater Voltage, AC or DC 6.3 Volts

Heater Current 0.8 Amperes

Direct Interelectrode Capacitances, approximate*

Grid-Number 1 to Plate 0.6 $\mu\mu\text{f}$

Input 12 $\mu\mu\text{f}$

Output 6.3 $\mu\mu\text{f}$

MECHANICAL

Mounting Position—Any

Envelope—T-5½, Glass

Base—E7-1, Miniature Button 7-Pin

MAXIMUM RATINGS

DESIGN-CENTER VALUES

Plate Voltage 150 Volts

Screen Voltage 117 Volts

Plate Dissipation 5.5 Watts

Screen Dissipation 1.0 Watts

Heater-Cathode Voltage

Heater Positive with Respect to Cathode 90 Volts

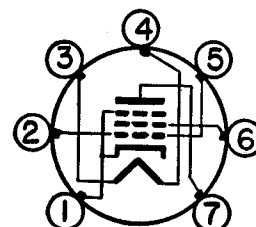
Heater Negative with Respect to Cathode 90 Volts

Grid-Number 1 Circuit Resistance

With Fixed Bias 0.1 Megohms

With Cathode Bias 0.5 Megohms

BASING DIAGRAM



RETMA 7CV

TERMINAL CONNECTIONS

Pin 1—Cathode and Beam
Plates

Pin 2—Grid Number 1

Pin 3—Heater

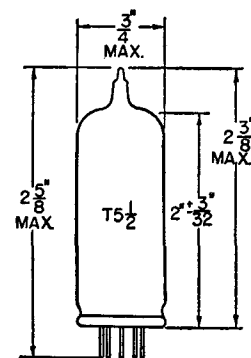
Pin 4—Heater

Pin 5—Grid Number 1

Pin 6—Grid Number 2
(Screen)

Pin 7—Plate

PHYSICAL DIMENSIONS



RETMA 5-3

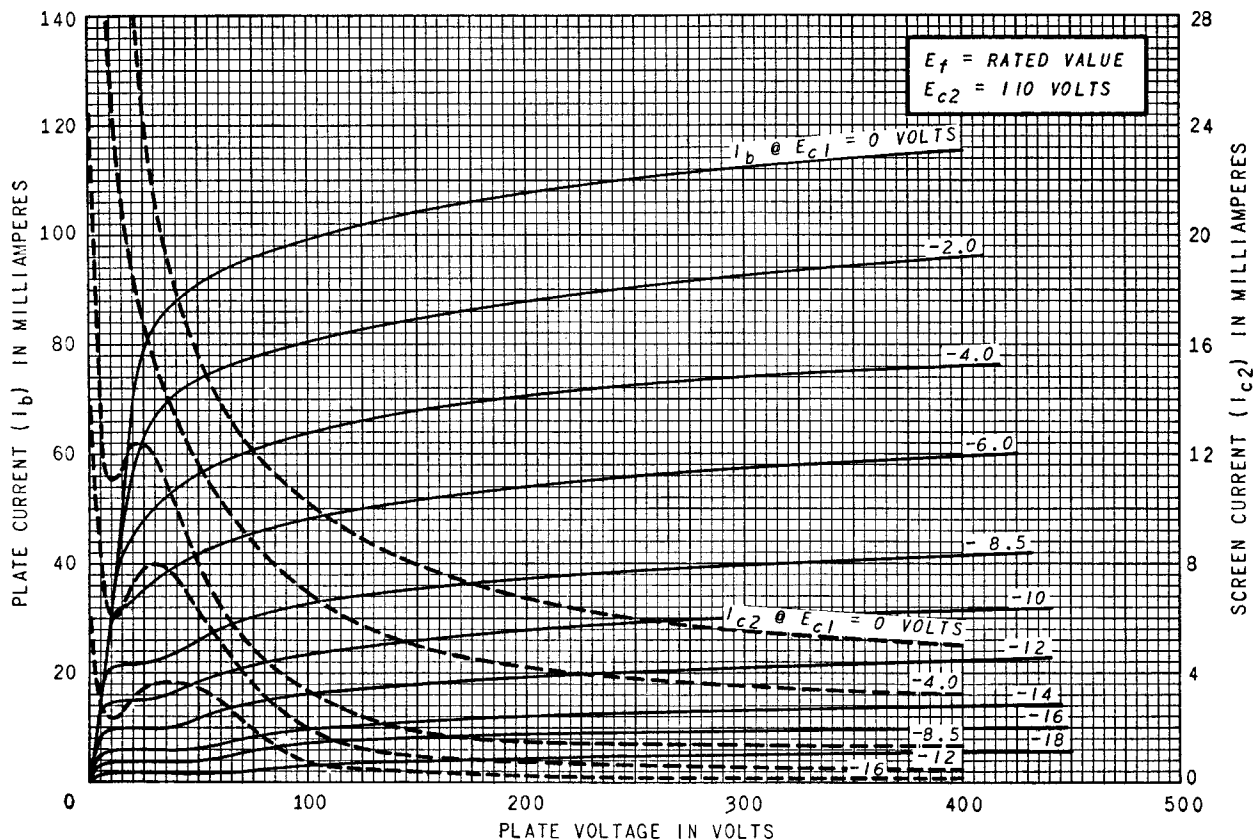
CHARACTERISTICS AND TYPICAL OPERATION

CLASS A₁ AMPLIFIER

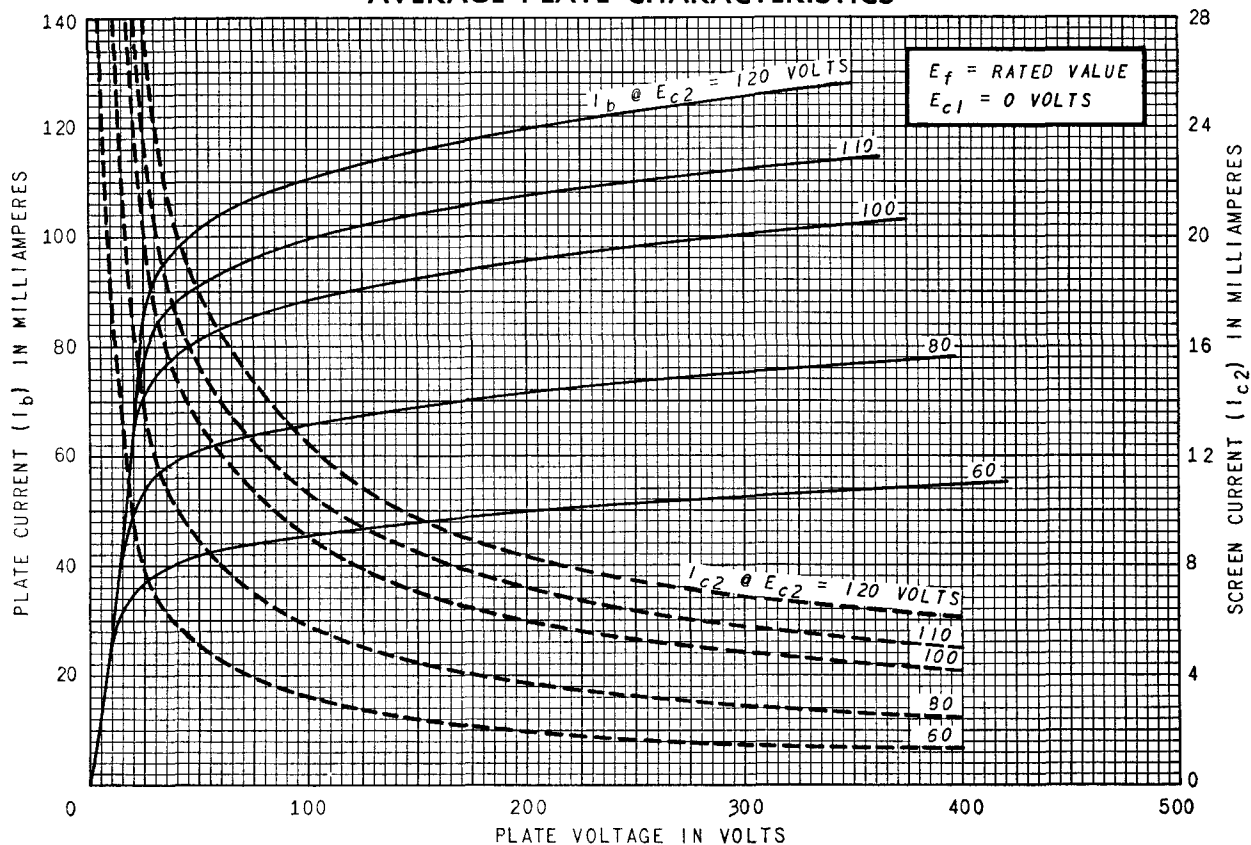
Plate Voltage	150	Volts
Screen Voltage	110	Volts
Grid-Number 1 Voltage	-8.5	Volts
Peak AF Grid-Number 1 Voltage	8.5	Volts
Transconductance	5600	Micromhos
Zero-Signal Plate Current	35	Milliamperes
Maximum-Signal Plate Current	36	Milliamperes
Zero-Signal Screen Current	2.0	Milliamperes
Maximum-Signal Screen Current	6.5	Milliamperes
Load Resistance	4500	Ohms
Total Harmonic Distortion, approximate	10	Percent
Maximum-Signal Power Output	2.2	Watts

* Without external shield.

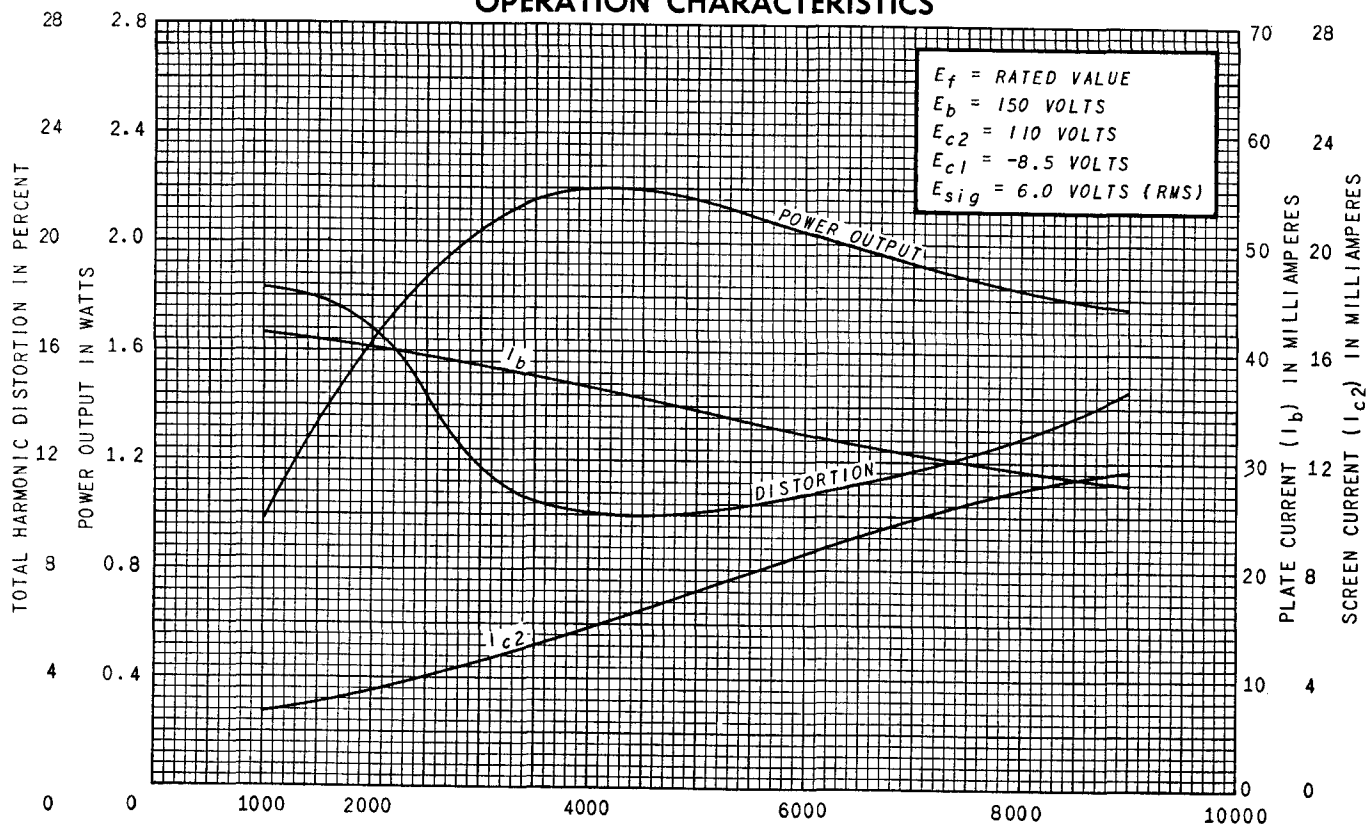
AVERAGE PLATE CHARACTERISTICS



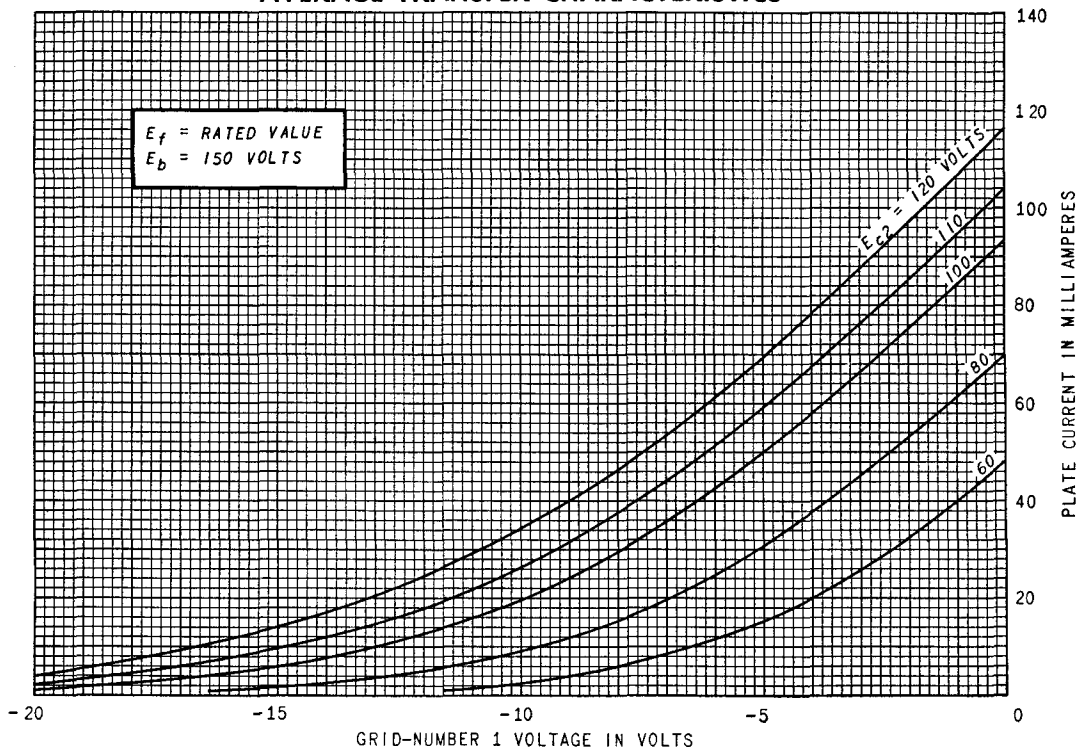
AVERAGE PLATE CHARACTERISTICS



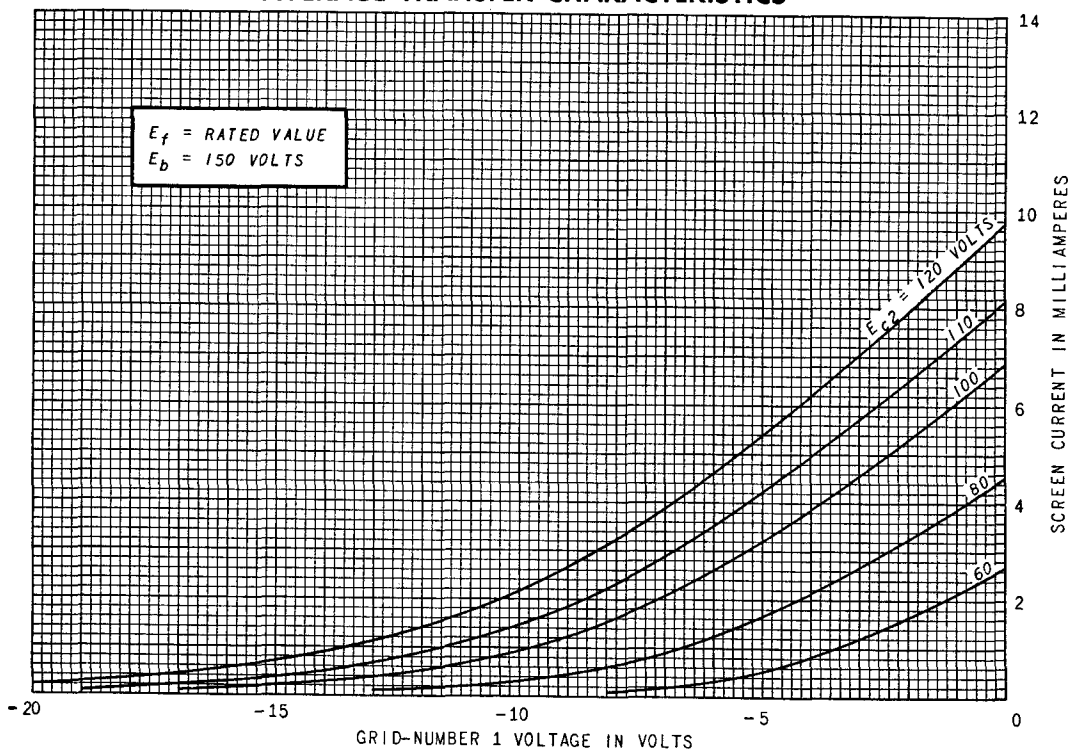
OPERATION CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



ELECTRONIC COMPONENTS DIVISION

GENERAL  ELECTRIC

Schenectady 5, N. Y.