

6AS5

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

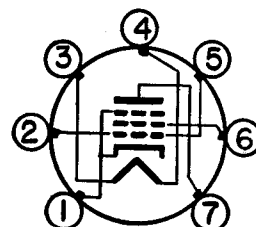
Mounting Position—Any
Envelope—T-5½, Glass
Base—E7-1, Miniature Button 7-Pin

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

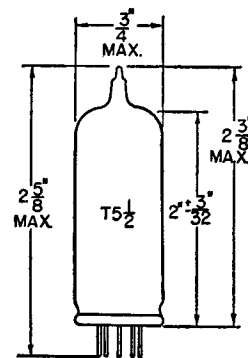


RETMA 7CV

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

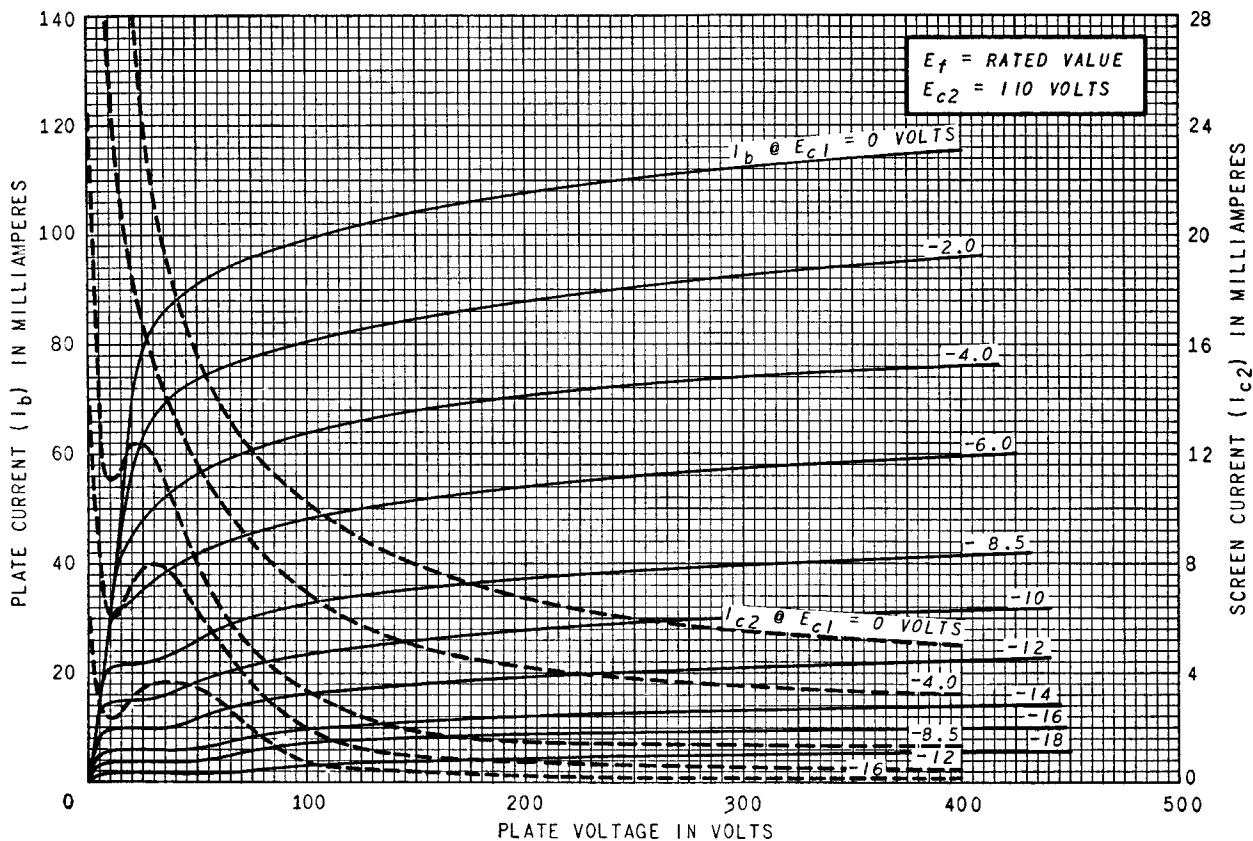
CHARACTERISTICS AND TYPICAL OPERATION

CLASS A₁ AMPLIFIER

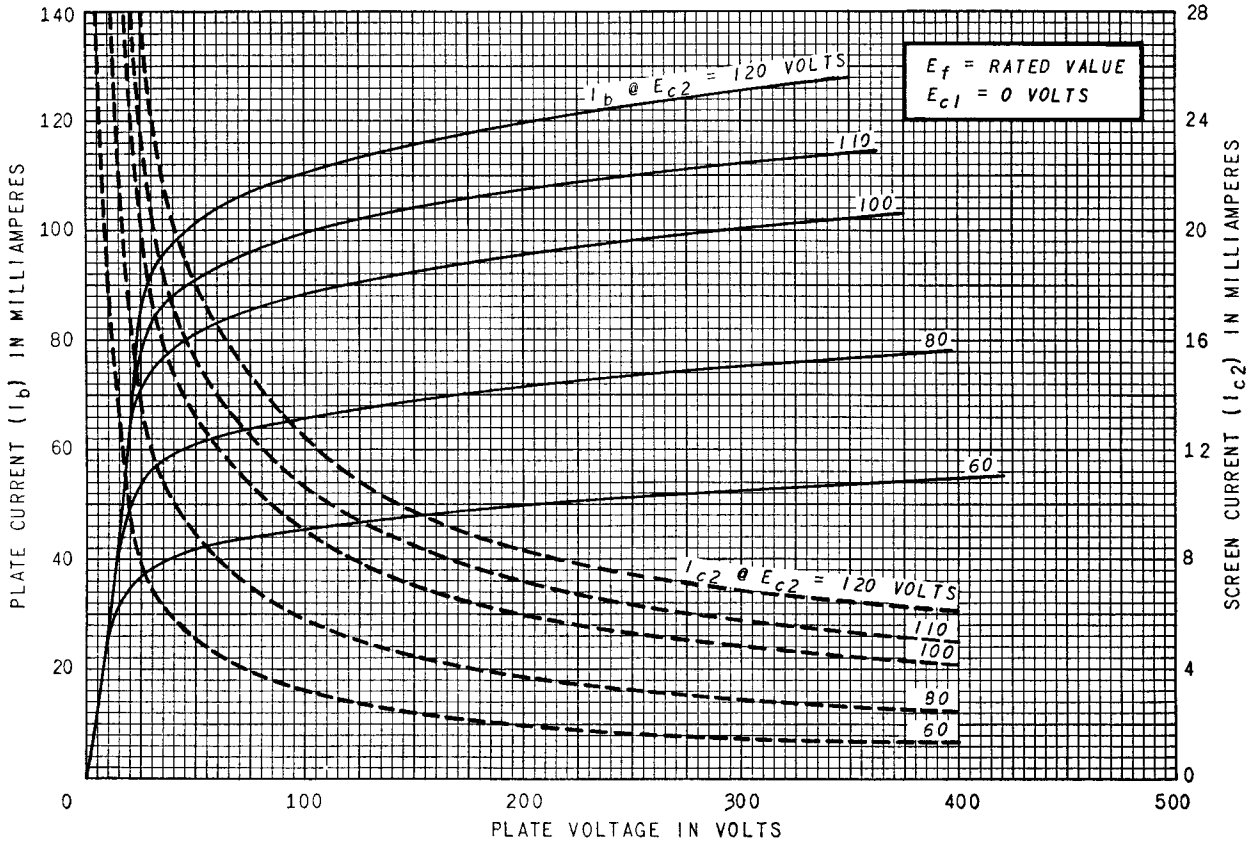
Plate Voltage	150	Volts
Screen Voltage	110	Volts
Grid-Number 1 Voltage	-8.5	Volts
Peak AF Grid-Number 1 Voltage	8.5	Volts
Transconductance	5600	Micromhos
Zero-Signal Plate Current	35	Milliamperes
Maximum-Signal Plate Current	36	Milliamperes
Zero-Signal Screen Current	2.0	Milliamperes
Maximum-Signal Screen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

* Without external shield.

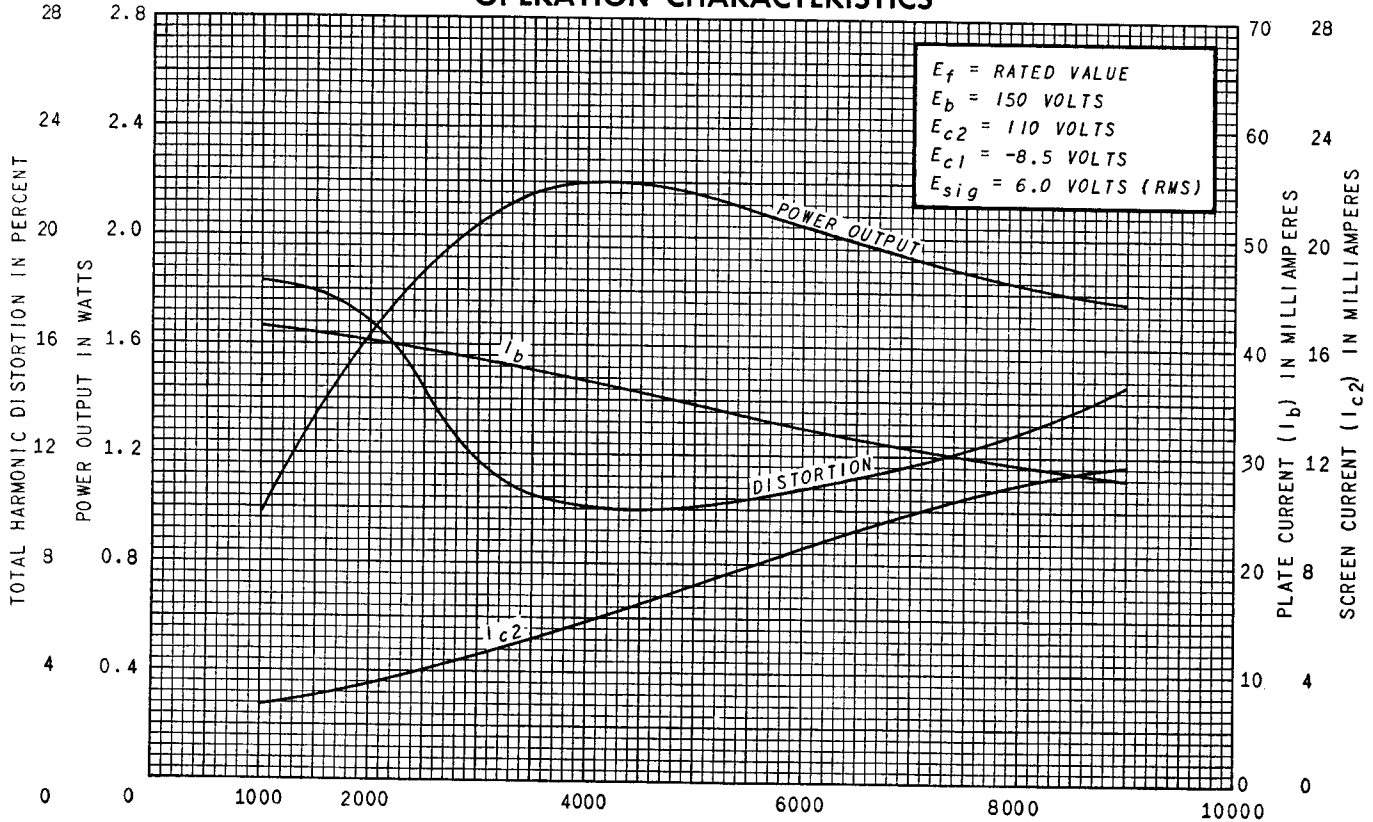
AVERAGE PLATE CHARACTERISTICS



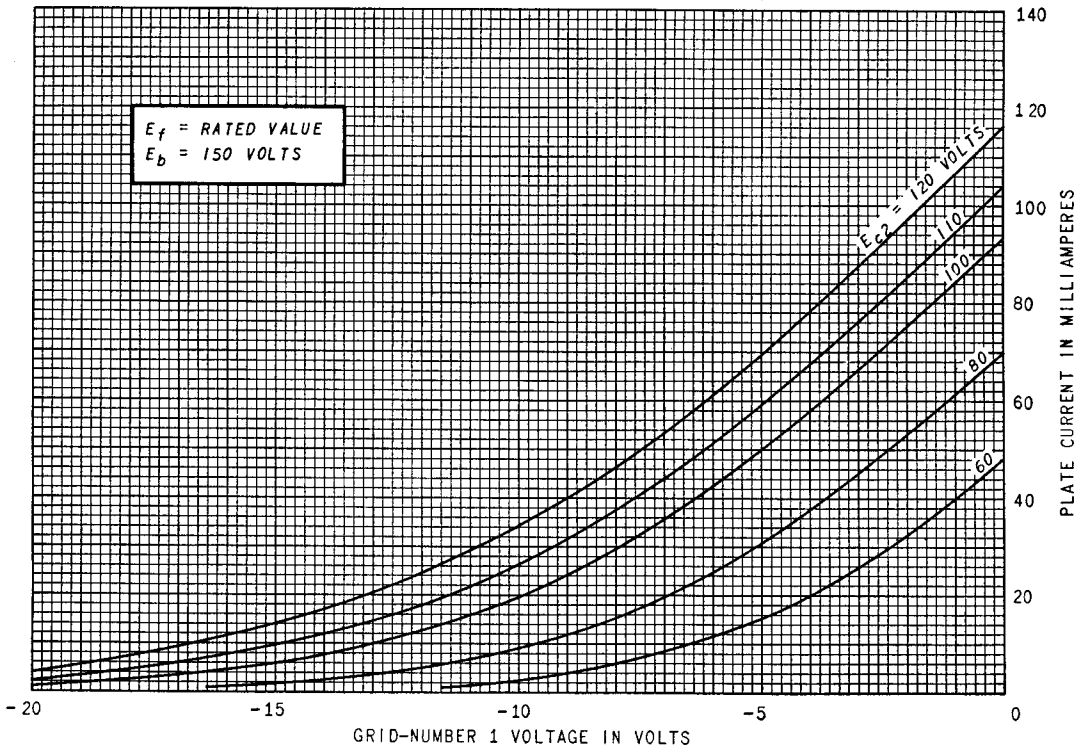
AVERAGE PLATE CHARACTERISTICS



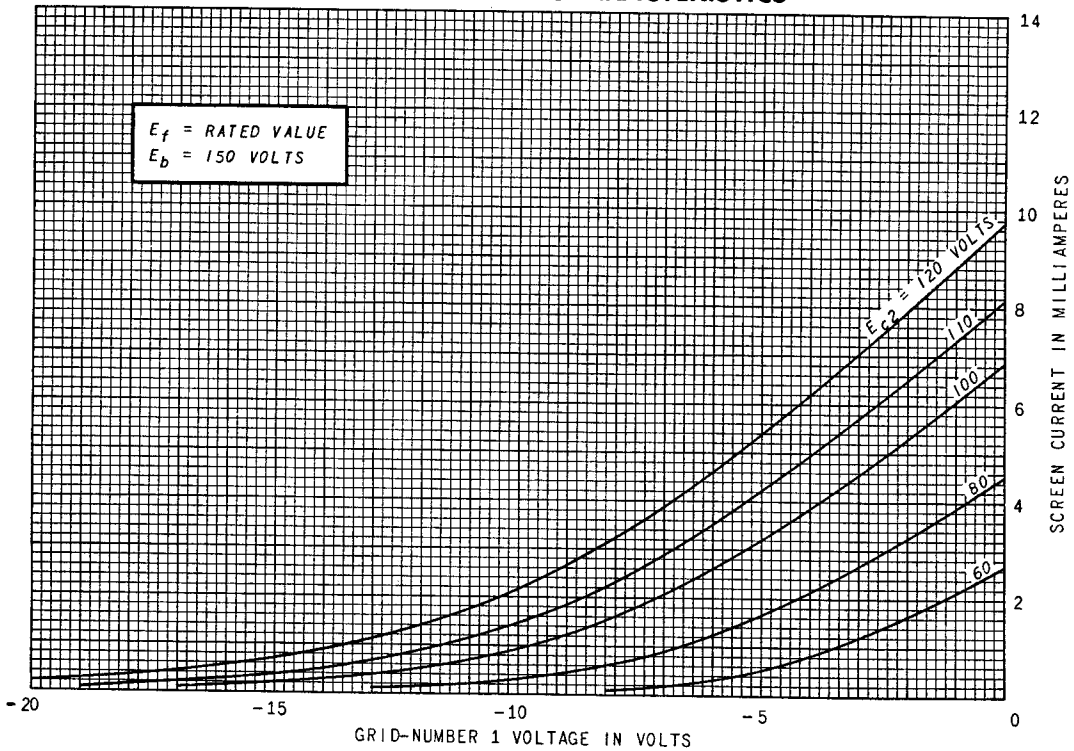
OPERATION CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



ELECTRONIC COMPONENTS DIVISION



Schenectady 5, N. Y.