

DESCRIPTION AND RATING

The 6Y6-GT is a beam power pentode primarily intended for use as an audio-frequency power amplifier. It is particularly useful in applications where the available supply voltage is relatively low. The 6Y6-GT differs from the 6Y6-G in only one respect, the straight-sided T-9 construction.

GENERAL

ELECTRICAL

Cathode—Coated Unipotential

Heater Voltage, AC or DC..... 6.3 Volts

Heater Current.....1.25 Amperes

MECHANICAL

Mounting Position—Any

Envelope—T-9, Glass

Base—B6-81 or B7-7, Intermediate Shell Octal

or B6-84 or B7-59, Short Intermediate Shell Octal

MAXIMUM RATINGS

DESIGN-CENTER VALUES

Plate Voltage..... 200 Volts

Screen Voltage..... 135 Volts

Plate Dissipation.....12.5 Watts

Screen Dissipation.....1.75 Watts

Heater-Cathode Voltage

Heater Positive with Respect to Cathode..... 180 Volts

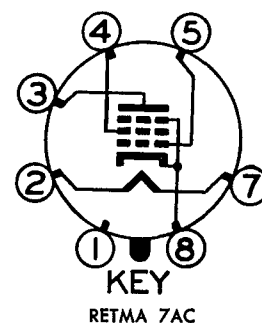
Heater Negative with Respect to Cathode..... 180 Volts

Grid-Number 1 Circuit Resistance

With Fixed Bias..... 0.1 Megohms

With Cathode Bias..... 0.5 Megohms

BASING DIAGRAM



TERMINAL CONNECTIONS

Pin 1—No Connection*

Pin 2—Heater

Pin 3—Plate

Pin 4—Grid Number 2
(Screen)

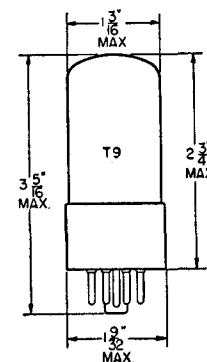
Pin 5—Grid Number 1

Pin 7—Heater

Pin 8—Cathode and Beam
Plates

* Pin 1 omitted on bases B6-81 and B6-84.

PHYSICAL DIMENSIONS



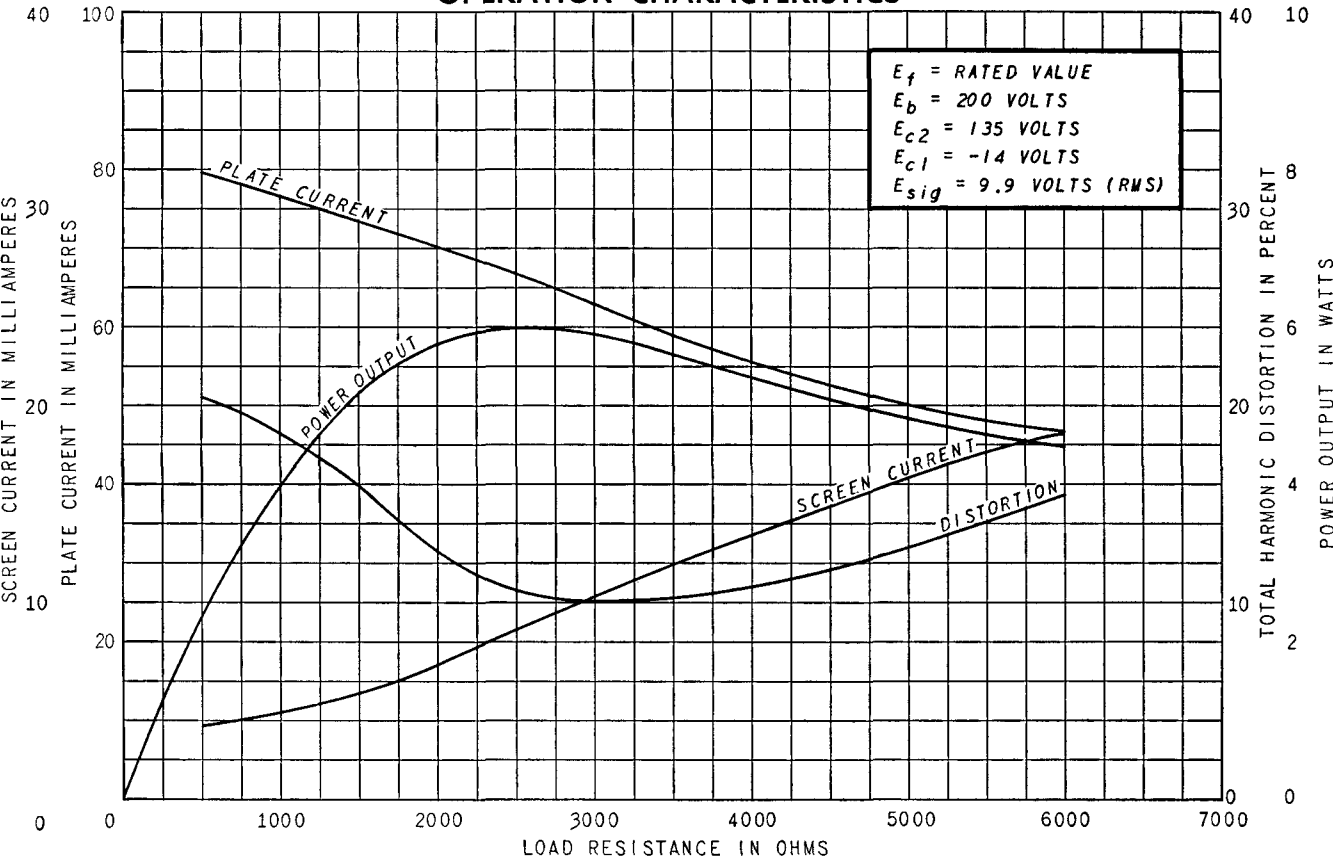
RETMA 9-11 OR 9-41

CHARACTERISTICS AND TYPICAL OPERATION

CLASS A₁ AMPLIFIER

Plate Voltage.....	135	200	Volts
Screen Voltage.....	135	135	Volts
Grid-Number 1 Voltage.....	-13.5	-14	Volts
Peak AF Grid-Number 1 Voltage.....	13.5	14	Volts
Plate Resistance, approximate.....	9300	18300	Ohms
Transconductance.....	7000	7100	Micromhos
Zero-Signal Plate Current.....	58	61	Milliamperes
Maximum-Signal Plate Current.....	60	66	Milliamperes
Zero-Signal Screen Current.....	3.5	2.2	Milliamperes
Maximum-Signal Screen Current.....	11.5	9.0	Milliamperes
Load Resistance.....	2000	2600	Ohms
Total Harmonic Distortion, approximate.....	10	10	Percent
Maximum-Signal Power Output.....	3.6	6.0	Watts

OPERATION CHARACTERISTICS



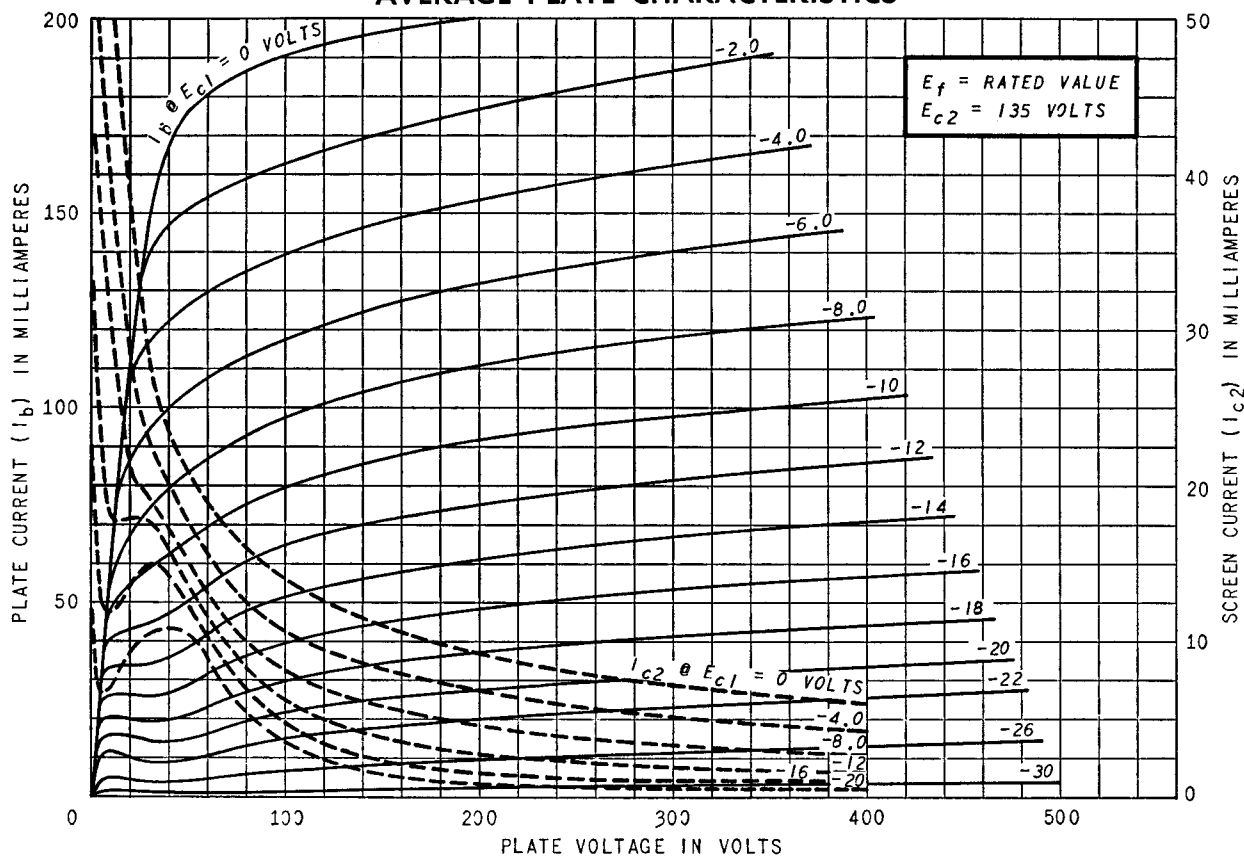
AVERAGE PLATE CHARACTERISTICS

6Y6-GT

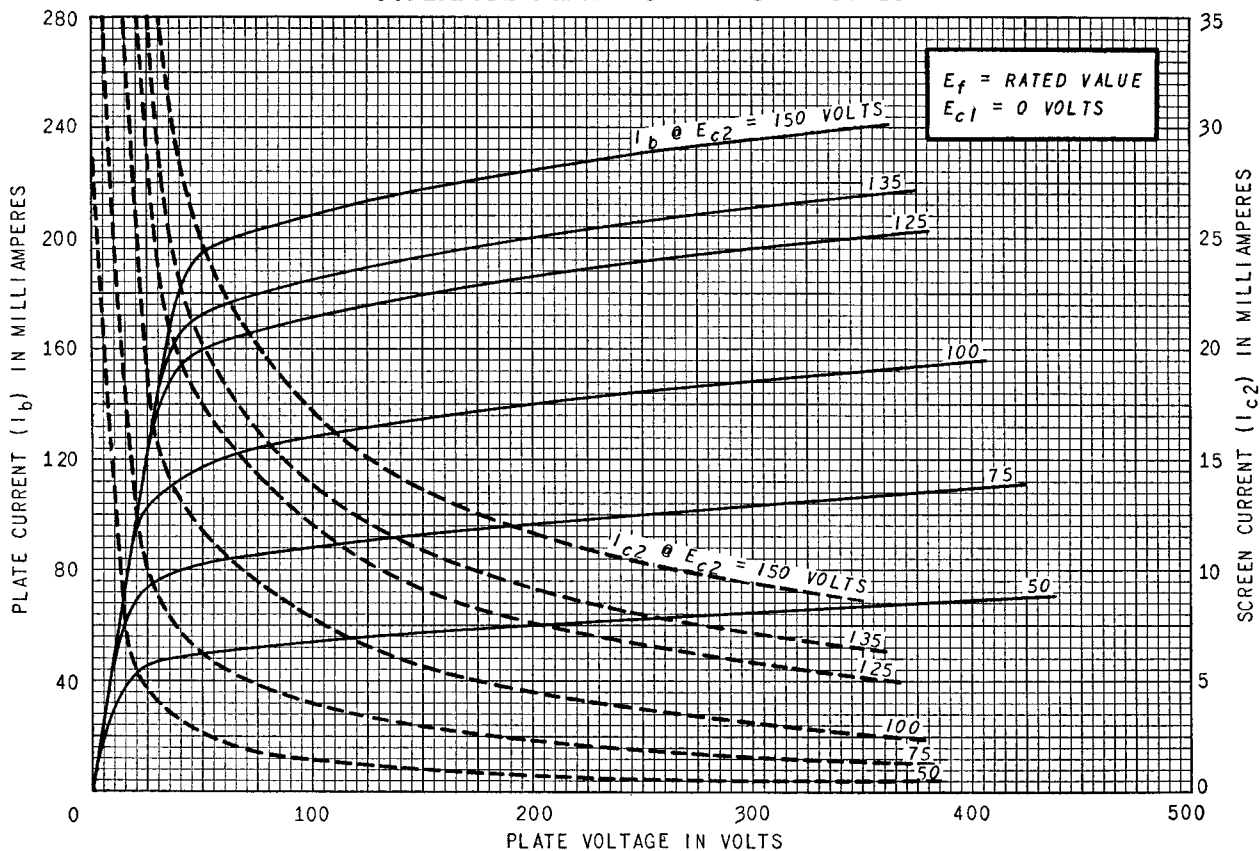
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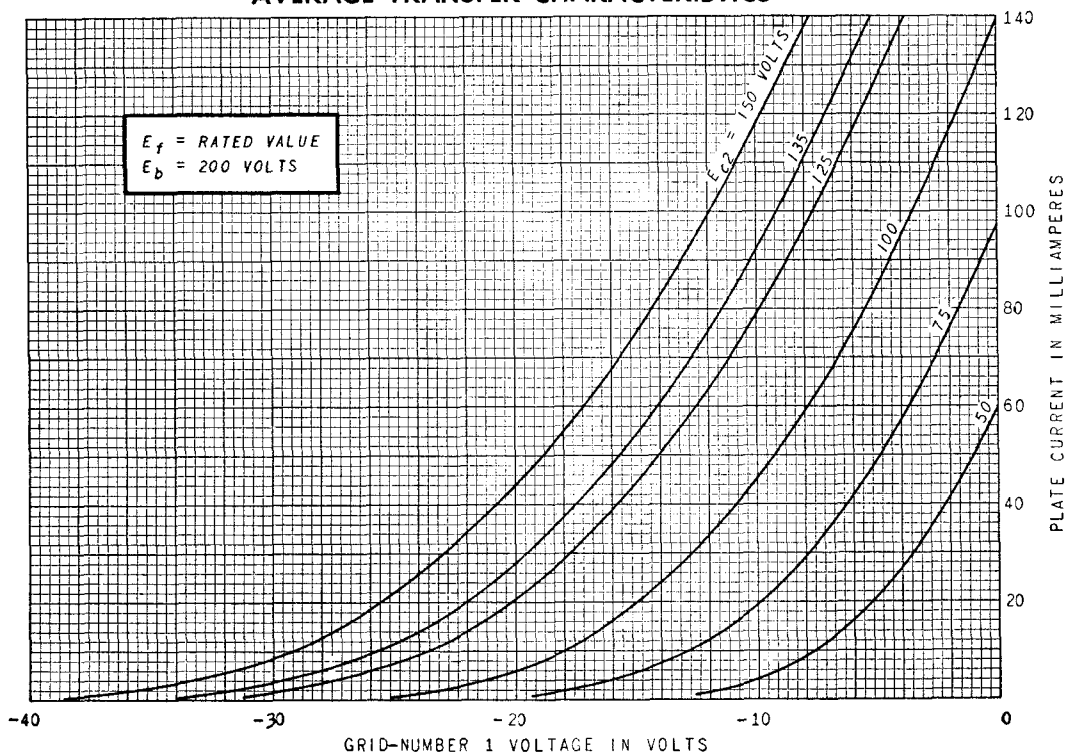
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AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS

