

BEAM PENTODE

FOR AF POWER AMPLIFIER APPLICATIONS

DESCRIPTION AND RATING

The 6CU5 is a miniature beam-power pentode primarily designed for use in the audio-frequency power-output stage of radio receivers. The tube features high power sensitivity and high efficiency at relatively low plate and screen voltages.

GENERAL

ELECTRICAL

Cathode—Coated Unipotential

Heater Voltage, AC or DC 6.3 Volts

Heater Current 1.2 Amperes

Direct Interelectrode Capacitances*

Grid-Number 1 to Plate 0.6 μmf

Input 13 μmf

Output 8.5 μmf

MECHANICAL

Mounting Position—Any

Envelope—T-5½, Glass

Base—E7-1, Miniature Button 7-Pin

MAXIMUM RATINGS

DESIGN-CENTER VALUES

Plate Voltage 135 Volts

Screen Voltage 117 Volts

Positive DC Grid-Number 1 Voltage 0 Volts

Plate Dissipation 6.0 Watts

Screen Dissipation 1.25 Watts

Heater-Cathode Voltage

Heater Positive with Respect to Cathode

DC Component 100 Volts

Total DC and Peak 200 Volts

Heater Negative with Respect to Cathode

Total DC and Peak 200 Volts

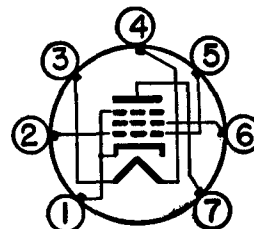
Grid-Number 1 Circuit Resistance

With Fixed Bias 0.1 Megohms

With Cathode Bias 0.5 Megohms

Bulb Temperature at Hottest Point 220 C

BASING DIAGRAM



EIA 7CV

TERMINAL CONNECTIONS

Pin 1—Cathode and Beam Plates

Pin 2—Grid Number 1

Pin 3—Heater

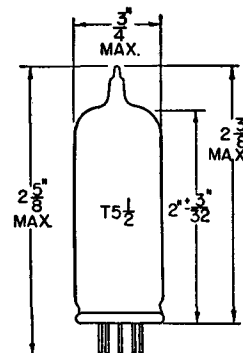
Pin 4—Heater

Pin 5—Grid Number 1

Pin 6—Grid Number 2 (Screen)

Pin 7—Plate

PHYSICAL DIMENSIONS



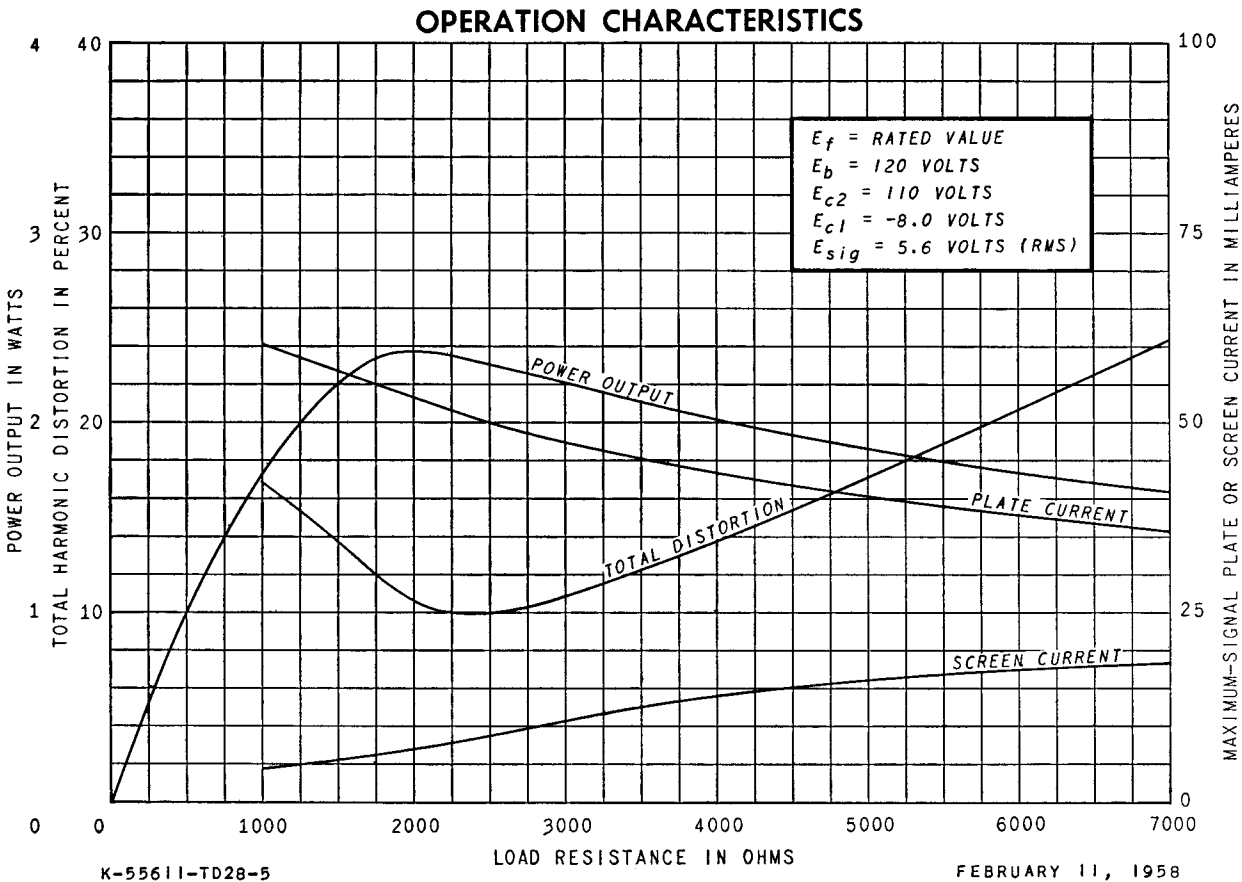
EIA 5-3

CHARACTERISTICS AND TYPICAL OPERATION

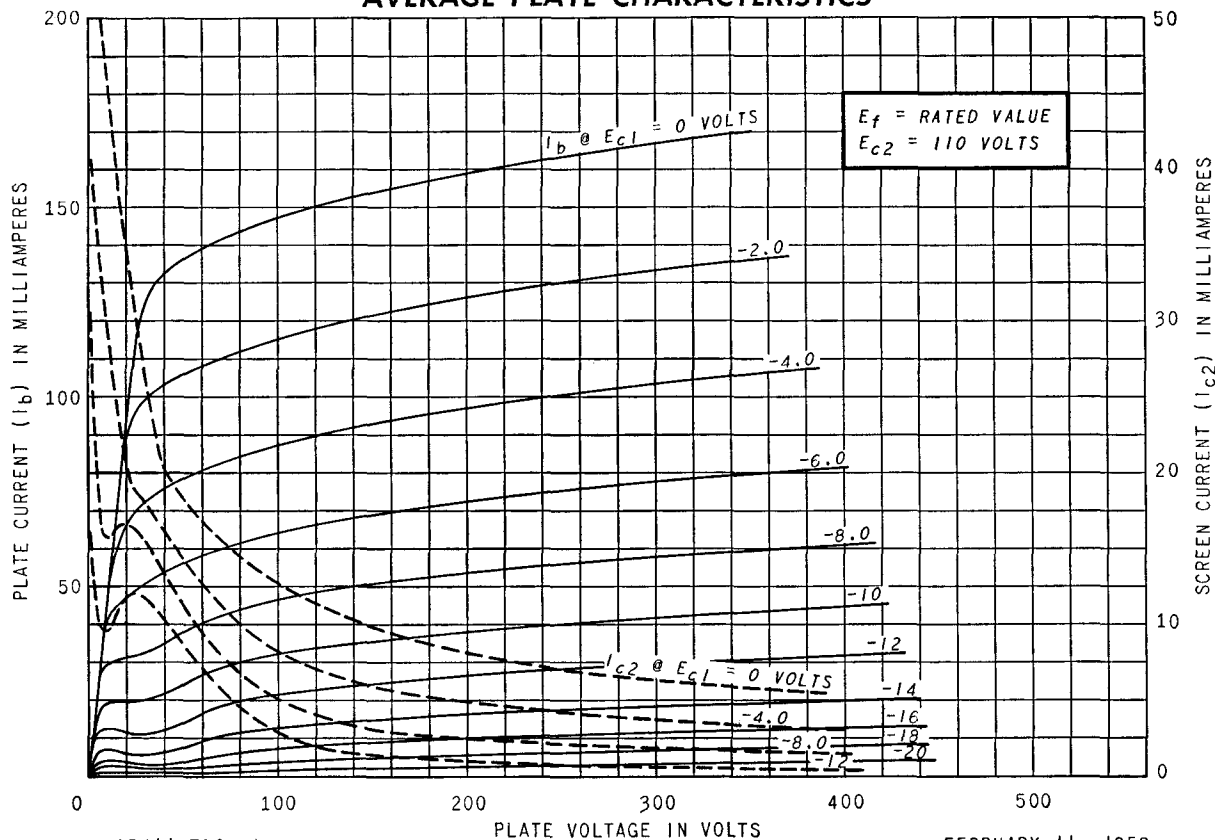
CLASS A₁ AMPLIFIER

Plate Voltage.....	120	Volts
Screen Voltage.....	110	Volts
Grid-Number 1 Voltage.....	-8.0	Volts
Peak AF Grid-Number 1 Voltage.....	8.0	Volts
Plate Resistance, approximate.....	10000	Ohms
Transconductance.....	7500	Micromhos
Zero-Signal Plate Current.....	49	Milliamperes
Maximum-Signal Plate Current.....	50	Milliamperes
Zero-Signal Screen Current.....	4.0	Milliamperes
Maximum-Signal Screen Current.....	8.5	Milliamperes
Load Resistance.....	2500	Ohms
Total Harmonic Distortion, approximate.....	10	Percent
Maximum-Signal Power Output.....	2.3	Watts

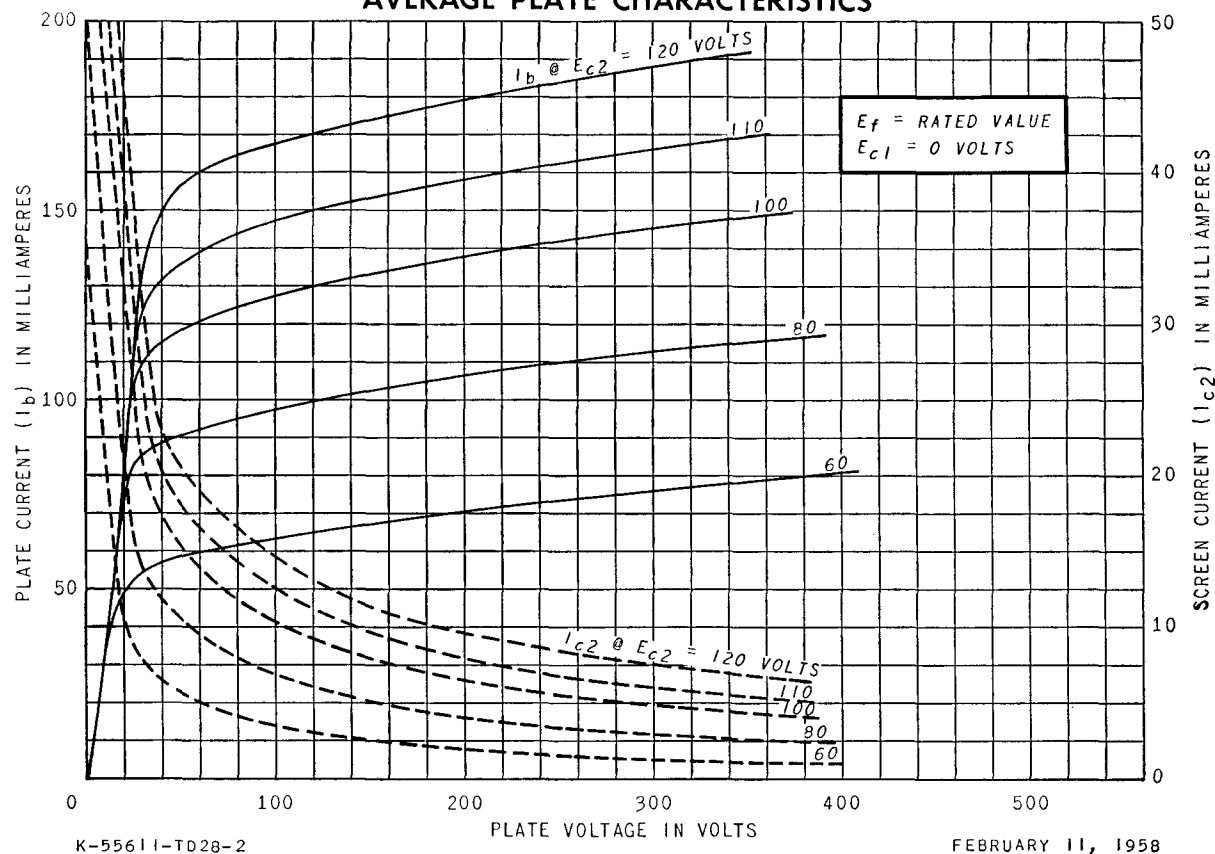
*Without external shield.



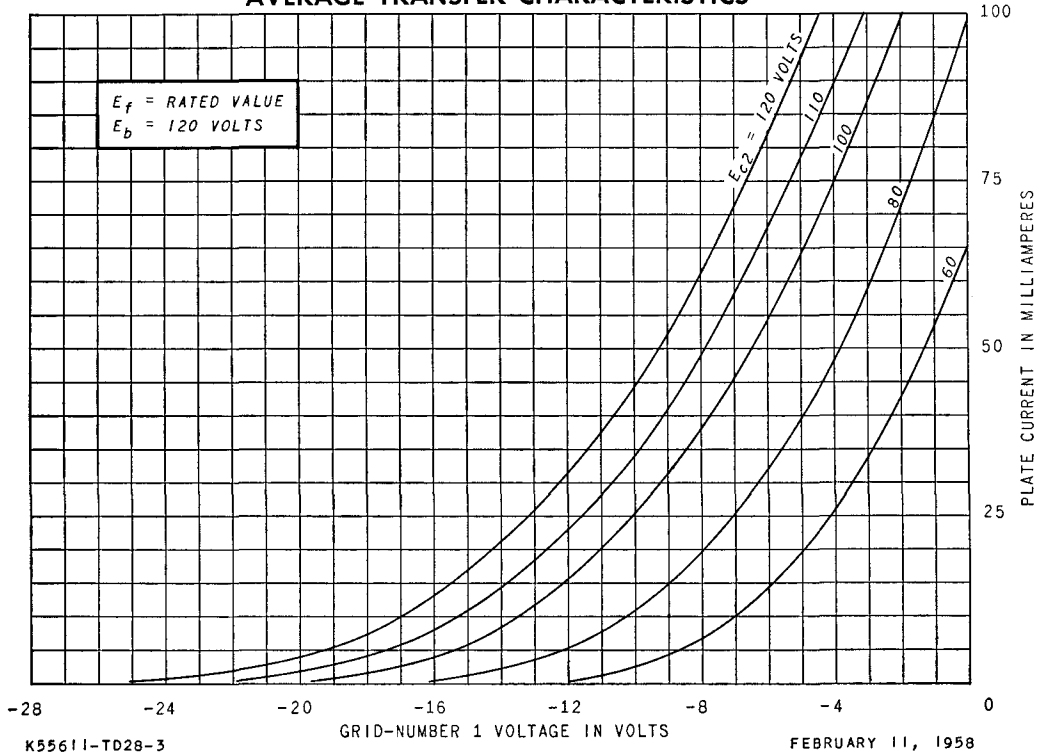
AVERAGE PLATE CHARACTERISTICS



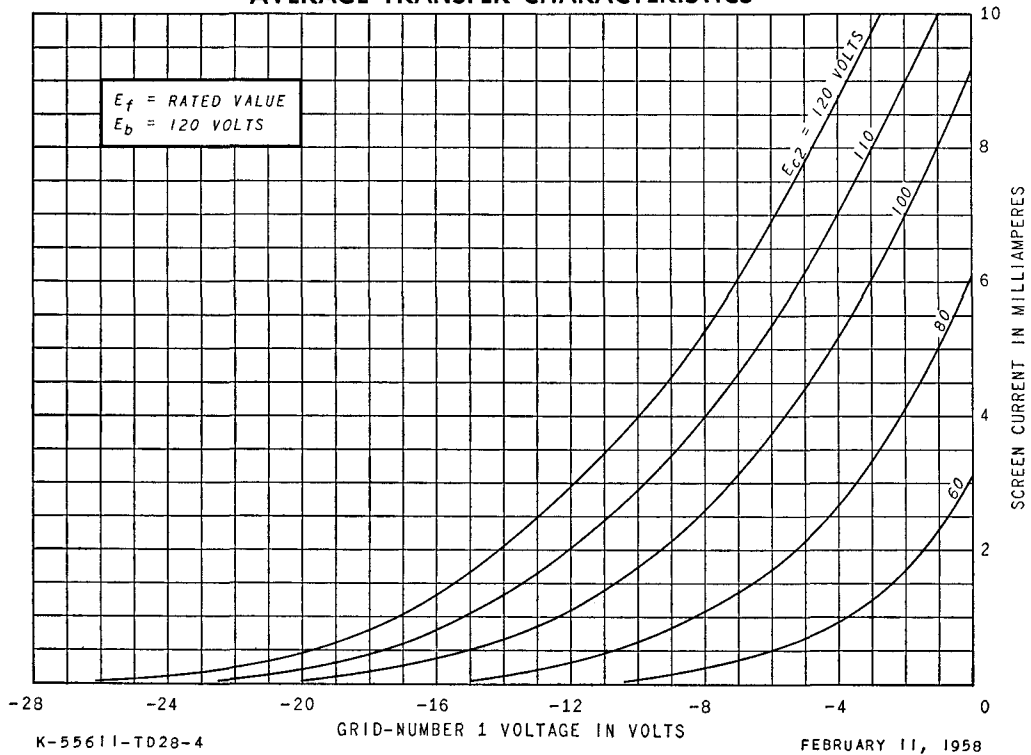
AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



ELECTRONIC COMPONENTS DIVISION

GENERAL  **ELECTRIC**

Schenectady 5, N. Y.