

# 35C5

## BEAM PENTODE

### DESCRIPTION AND RATING

The 35C5 is a miniature 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
Direct Interelectrode Capacitances, approximate*		
Grid-Number 1 to Plate	0.6	$\mu\mu\text{f}$
Input	12	$\mu\mu\text{f}$
Output	9.0	$\mu\mu\text{f}$

##### MECHANICAL

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

#### MAXIMUM RATINGS

##### DESIGN-CENTER VALUES

Plate Voltage	135	Volts
Screen Voltage	117	Volts
Plate Dissipation	4.5	Watts
Screen Dissipation	1.0	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
Bulb Temperature at Hottest Point	250	C

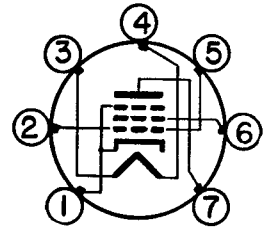
#### CHARACTERISTICS AND TYPICAL OPERATION

##### CLASS A<sub>1</sub> AMPLIFIER

Plate Voltage	110	Volts
Screen Voltage	110	Volts
Grid-Number 1 Voltage	-7.5	Volts
Peak AF Grid-Number 1 Voltage	7.5	Volts
Plate Resistance, approximate	13000	Ohms
Transconductance	5800	Micromhos
Zero-Signal Plate Current	40	Milliamperes
Maximum-Signal Plate Current	41	Milliamperes
Zero-Signal Screen Current	3.0	Milliamperes
Maximum-Signal Screen Current	7.0	Milliamperes
Load Resistance	2500	Ohms
Total Harmonic Distortion, approximate	10	Percent
Maximum-Signal Power Output	1.5	Watts

\* Without external shield.

#### BASING DIAGRAM

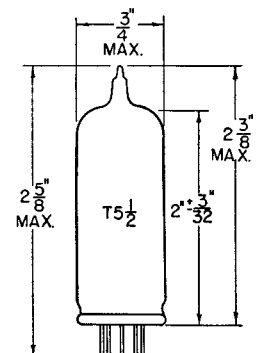


RETMA 7CV

#### TERMINAL CONNECTIONS

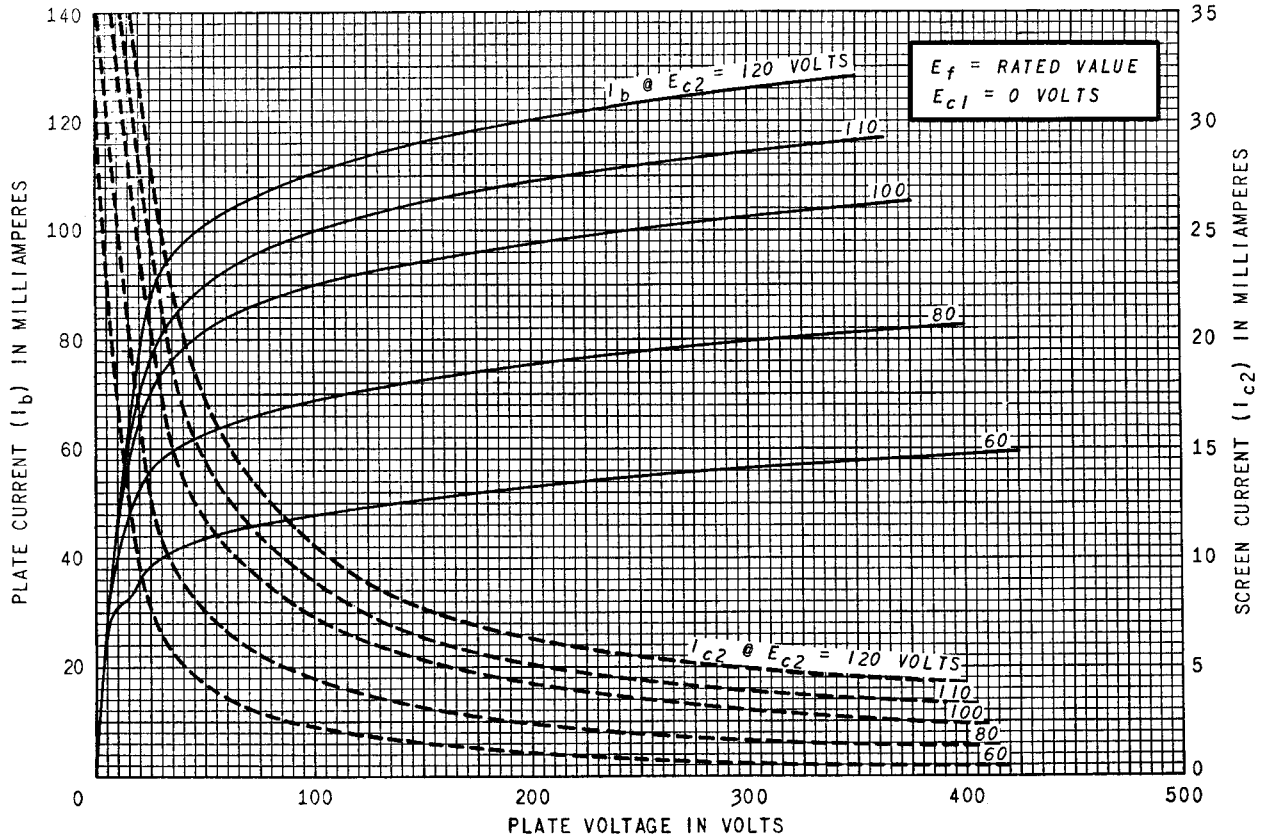
- Pin 1—Cathode and Beam Plates
- Pin 2—Grid Number 1
- Pin 3—Heater
- Pin 4—Heater
- Pin 5—Grid Number 1
- Pin 6—Grid Number 2 (Screen)
- Pin 7—Plate

#### PHYSICAL DIMENSIONS

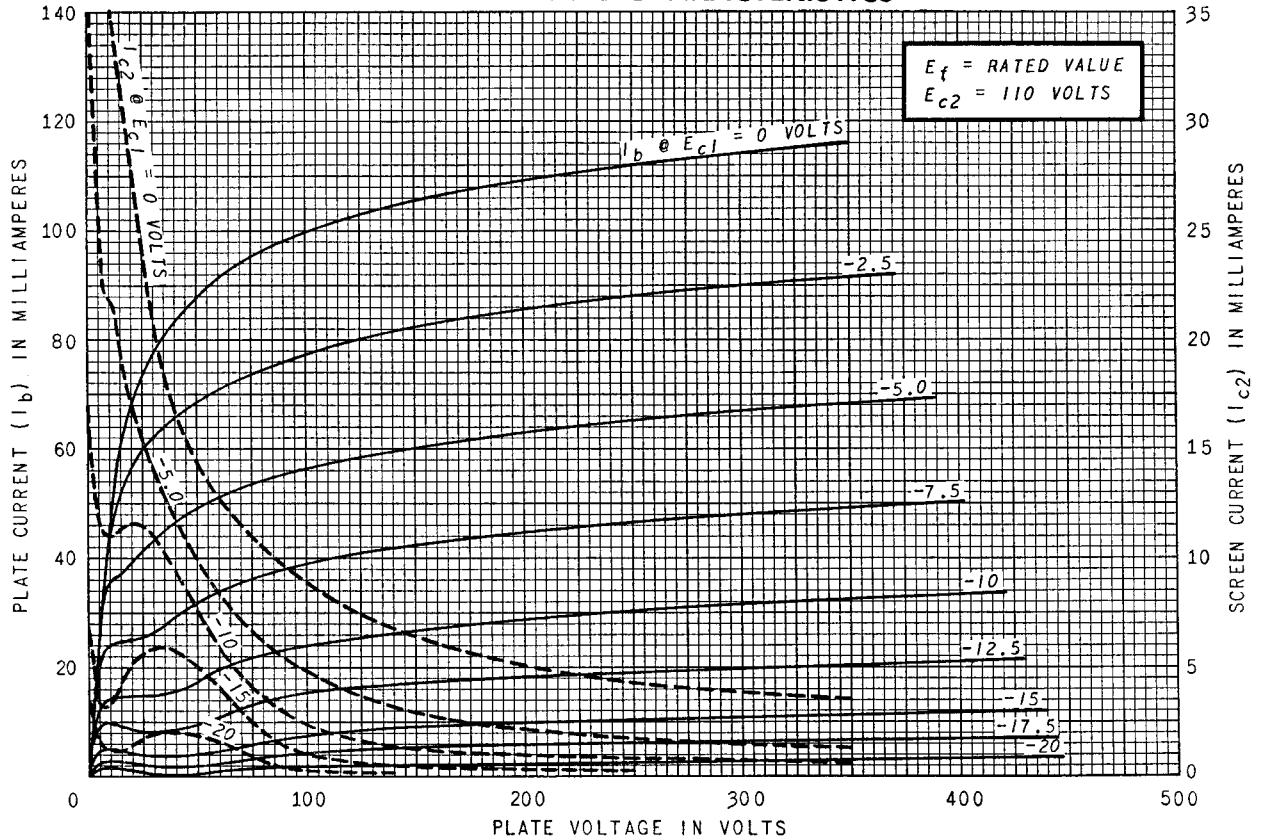


RETMA 5-3

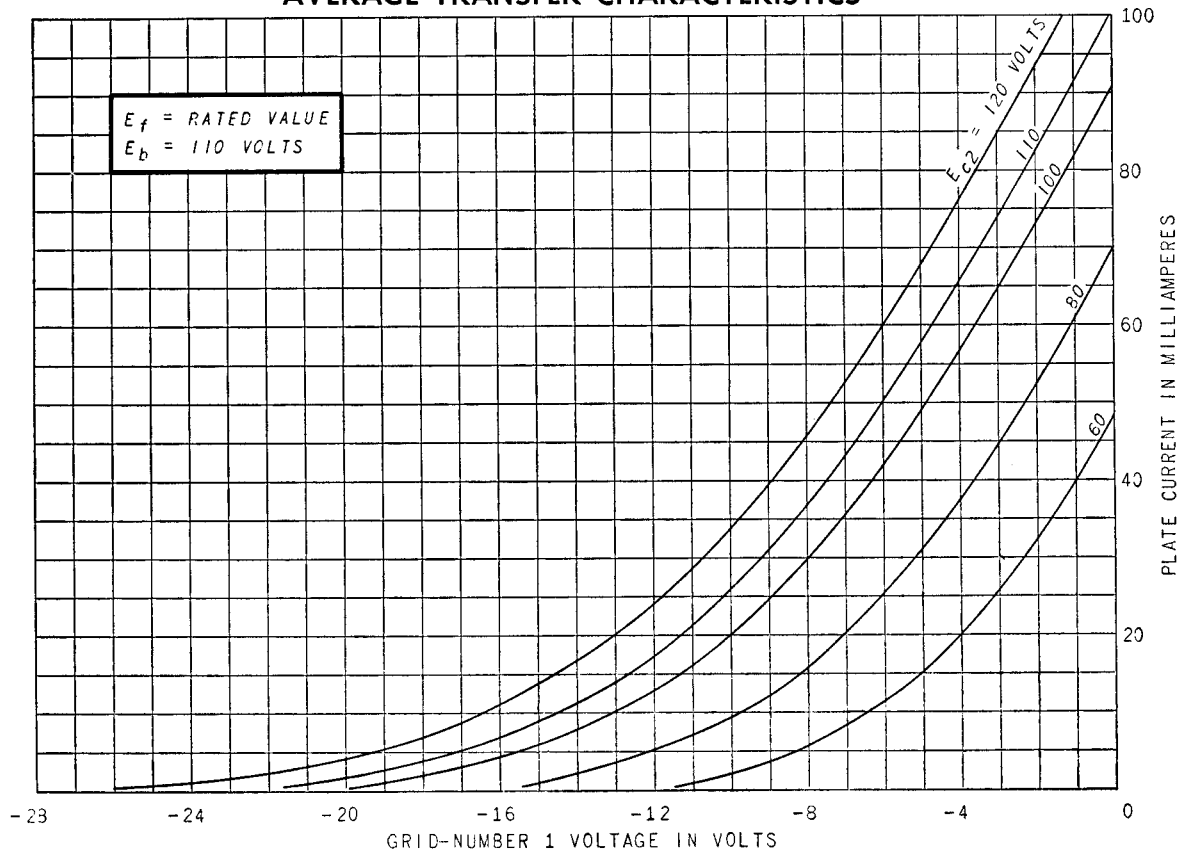
**AVERAGE PLATE CHARACTERISTICS**



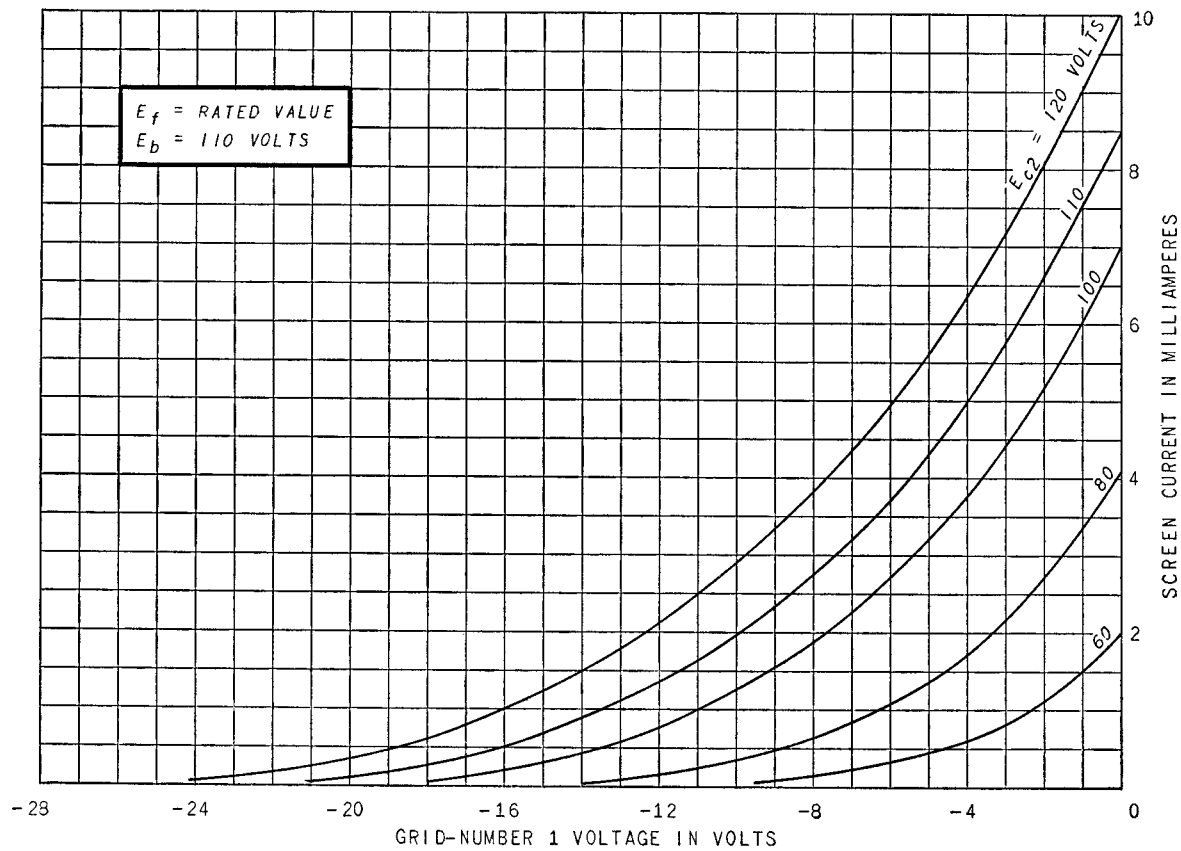
**AVERAGE PLATE CHARACTERISTICS**



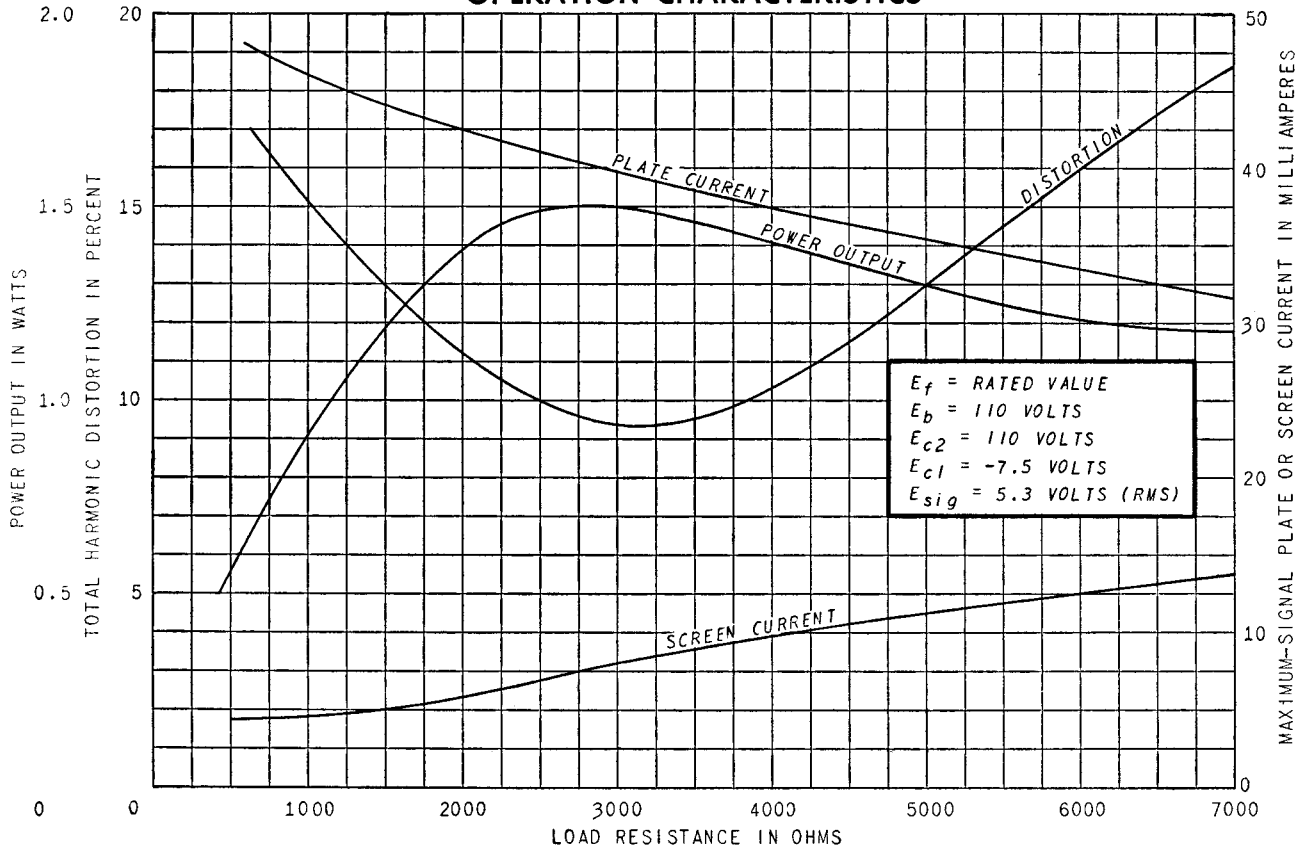
**AVERAGE TRANSFER CHARACTERISTICS**



**AVERAGE TRANSFER CHARACTERISTICS**



**OPERATION CHARACTERISTICS**



**ELECTRONIC COMPONENTS DIVISION**  
**GENERAL  ELECTRIC**  
 Schenectady 5, N. Y.