

**Scanned Datasheet**

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## MECHANICAL DATA

Bulb . . . . .	T-6½
Base . . . . .	E9-1, Small Button 9-Pin
Outline . . . . .	6-2
Basing . . . . .	9DZ
Cathode . . . . .	Coated Unipotential
Mounting Position . . . . .	Any

## ELECTRICAL DATA

### HEATER CHARACTERISTICS

Heater Voltage . . . . .	4.7 Volts
Heater Current . . . . .	600 Ma
Heater Warm-up Time <sup>1</sup> . . . . .	11 Seconds
Heater-Cathode Voltage (Design Center Values)	
Heater Negative with Respect to Cathode	
Total DC and Peak . . . . .	200 Volts Max.
Heater Positive with Respect to Cathode	
DC . . . . .	100 Volts Max.
Total DC and Peak . . . . .	200 Volts Max.

### DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

<b>Triode Section</b>	
Grid to Plate . . . . .	1.5 μmf
Input . . . . .	2.0 μmf
Output . . . . .	0.27 μmf
<b>Pentode Section</b>	
Grid No. 1 to Plate . . . . .	0.04 μmf Max.
Input . . . . .	7.0 μmf
Output . . . . .	2.3 μmf
Triode Grid to Pentode Plate . . . . .	0.005 μmf
Pentode Grid No. 1 to Triode Plate . . . . .	0.006 μmf
Pentode Plate to Triode Plate . . . . .	0.045 μmf

### RATINGS (Design Center Values)

	Triode	Pentode
Plate Voltage . . . . .	300	300 Volts Max.
Grid No. 2 Supply Voltage . . . . .		300 Volts Max.
Grid No. 2 Voltage . . . . .	See Rating Chart	
Grid No. 1 Voltage		
Positive Bias Value . . . . .	0	0 Volts Max.
Plate Dissipation . . . . .	2.5	2.0 Watts Max.
Grid No. 2 Input . . . . .		0.5 Watt Max.
Grid No. 1 Circuit Resistance <sup>2</sup>		
Cathode Bias . . . . .	1.0	1.0 Megohm Max.
Fixed Bias . . . . .	0.5	0.25 Megohm Max.

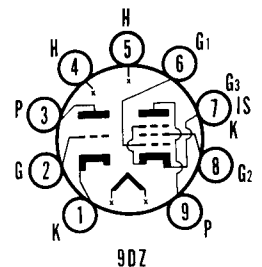
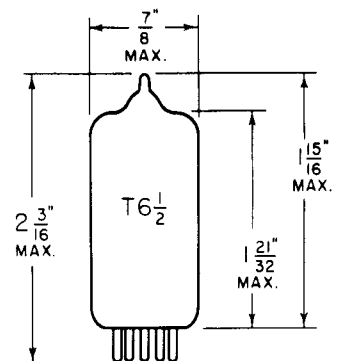
### CHARACTERISTICS

	Triode	Pentode
Plate Supply Voltage . . . . .	200	200 Volts
Grid No. 2 Supply Voltage . . . . .		150 Volts
Grid No. 1 Voltage . . . . .	-6	Volts
Cathode Bias Resistor . . . . .		180 Ohms
Plate Current . . . . .	13	9.5 Ma
Grid No. 2 Current . . . . .		2.8 Ma
Amplification Factor . . . . .	19	
Plate Resistance (approx.) . . . . .	5750	300,000 Ohms
Transconductance . . . . .	3300	6200 μmhos
Grid No. 1 Voltage for I <sub>b</sub> =		
10 μa (approx.) . . . . .	-19	-8 Volts

## QUICK REFERENCE DATA

The Sylvania Type 5AV8 is a medium mu triode and sharp cutoff pentode contained in a 9-pin, miniature envelope. It is intended for service in television receivers employing a series heater arrangement.

Except for heater characteristics and basing, the Type 5AV8 is identical to the 6AN8.



**SYLVANIA ELECTRIC  
PRODUCTS INC.**

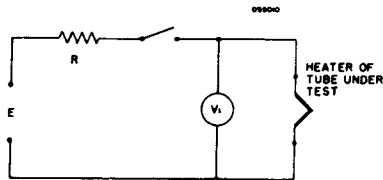
**RADIO TUBE DIVISION  
EMPORIUM, PA.**

*Prepared and Released By The  
TECHNICAL PUBLICATIONS SECTION  
EMPORIUM, PENNSYLVANIA*

JULY 1955

## NOTES:

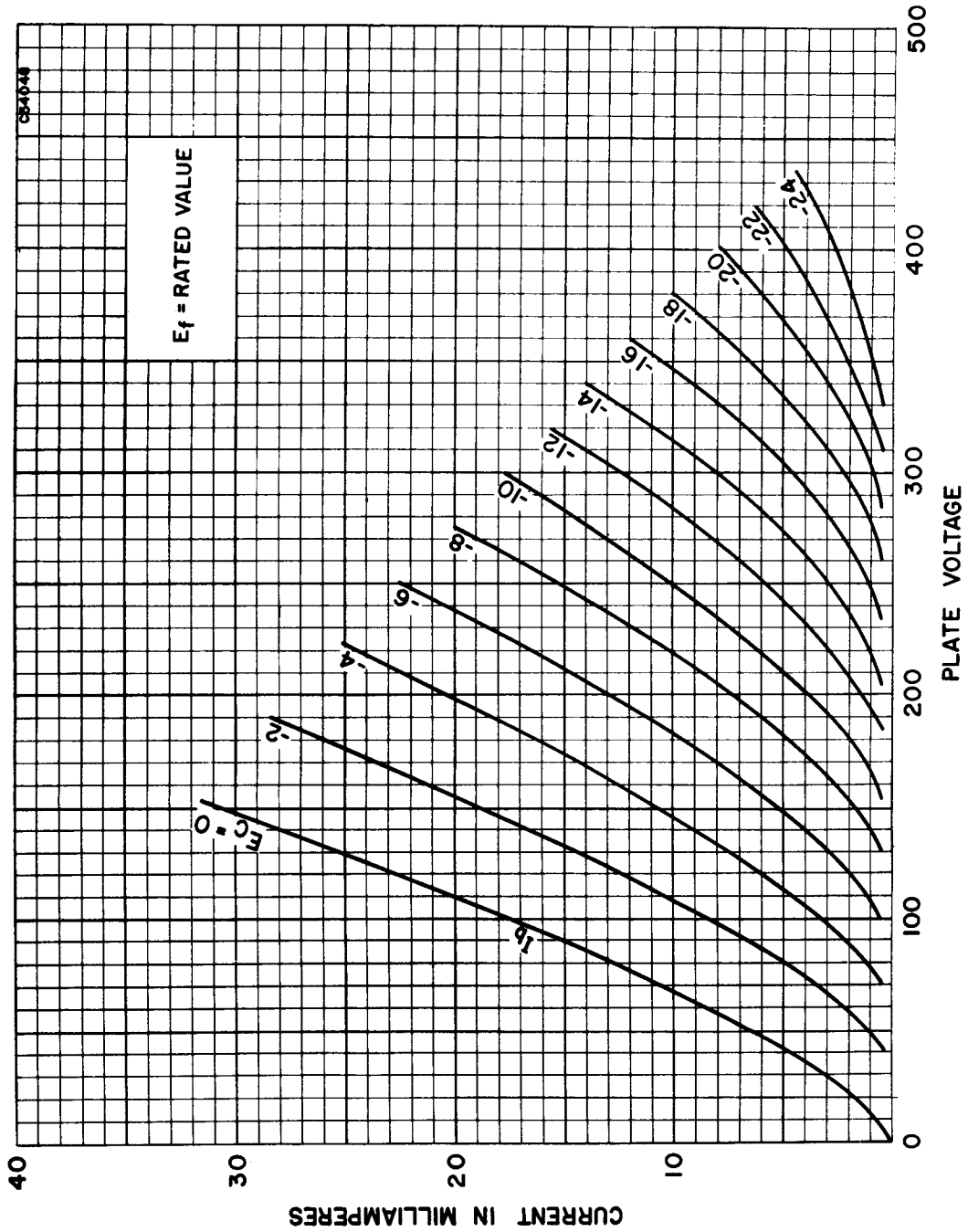
1. *Heater Warm-up Time is defined as the time required in the circuit shown below for the voltage across the heater terminals to increase from zero to the heater test voltage (V1). The conditions used in conjunction with the test circuit depend upon the rated heater voltage and current of the tube under test. For this type:  $E = 18.8$  Volts,  $R = 23.6$  Ohms,  $V1 = 3.75$  Volts.*



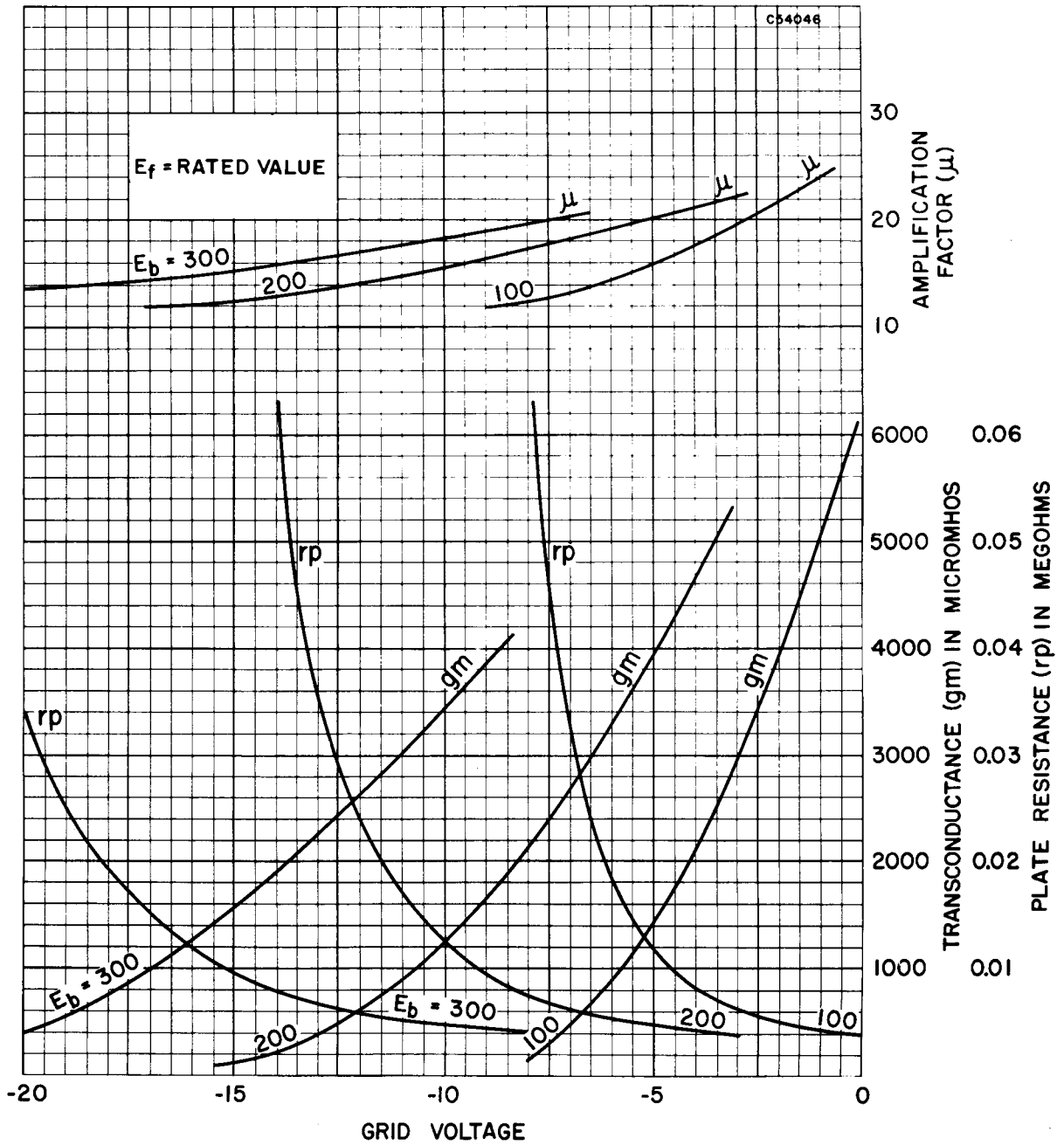
- $E$  — Applied Voltage, RMS or DC  
 $R$  — Total Series Resistance  
 $V1$  — Heater Test Voltage, RMS or DC  
(80% Rated Heater Voltage)

2. *If either unit is operating at maximum rated conditions, Grid No. 1 Circuit resistances for both units should not exceed the stated values.*

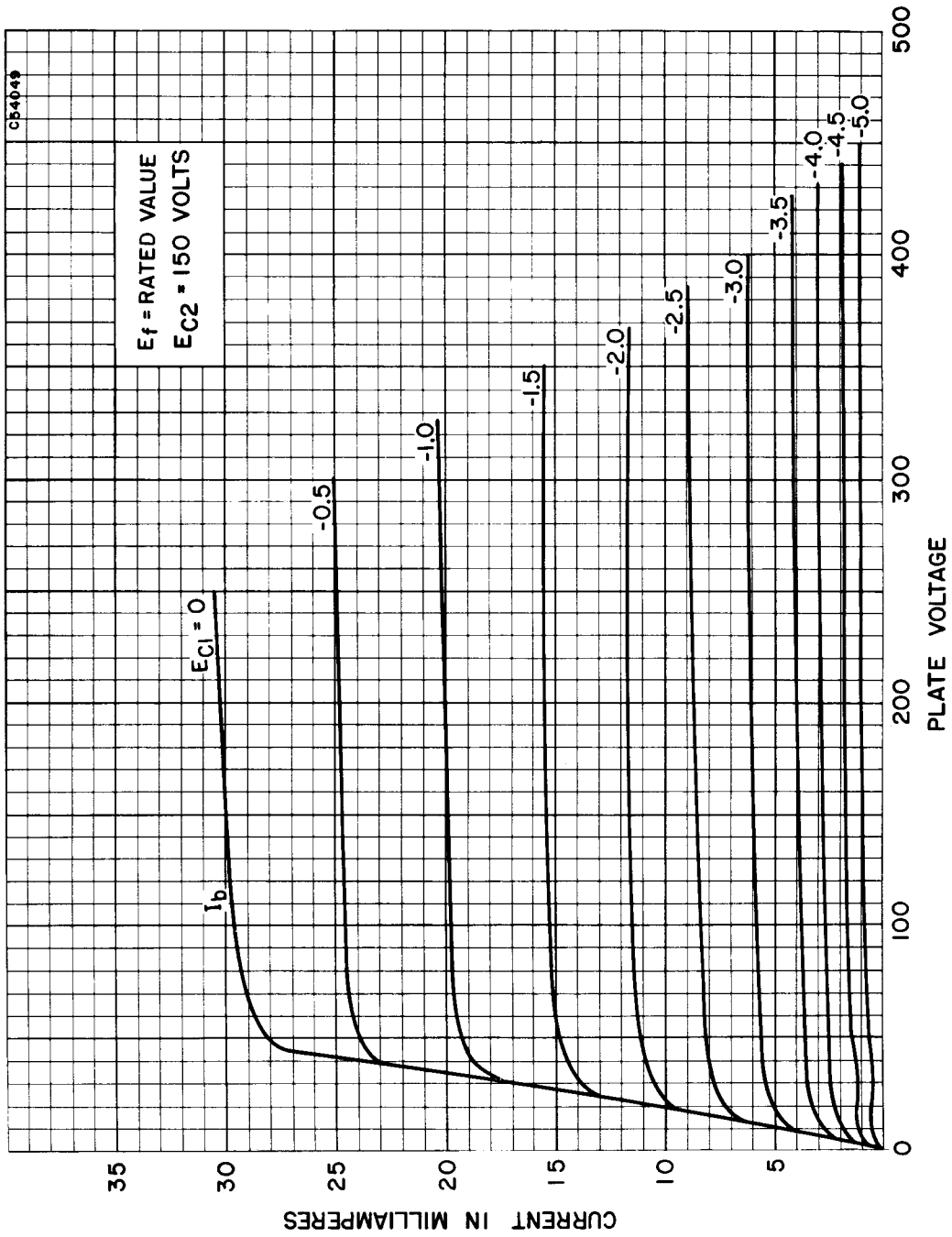
AVERAGE PLATE CHARACTERISTICS  
TRIODE SECTION



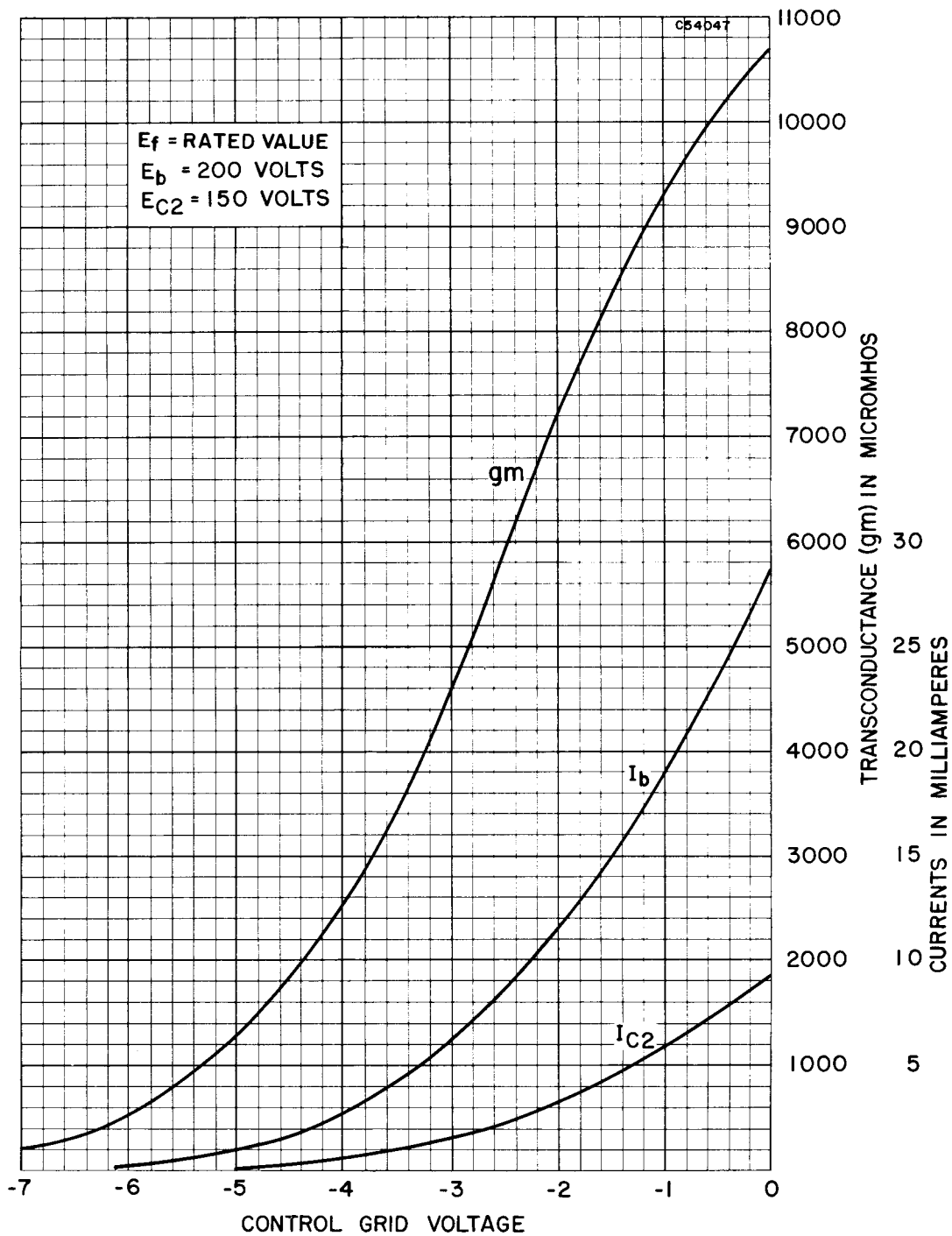
AVERAGE TRANSFER CHARACTERISTICS  
TRIODE SECTION



AVERAGE PLATE CHARACTERISTICS  
PENTODE SECTION



AVERAGE TRANSFER CHARACTERISTICS  
PENTODE SECTION



RATING CURVE

