engineering data service

SYLVANIA

5AV8

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[1]	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)

Triode Section	
Grid to Plate	1.5 μμf
Input	2.0 μμf
Output	0.27 μμf
Pentode Section	
Grid No. 1 to Plate	0.04 μμf Max.
Input	7.0 μμf
Output	2.3 μμf
Triode Grid to Pentode Plate	0.005 μμf
Pentode Grid No. 1 to Triode Plate	0.006 μμf
Pentode Plate to Triode Plate	0.045 μμf

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[2]			
Cathode Bias	1.0	1.0	Megohm Max.
Fixed Bias	0.5	0.25	Megohm Max.

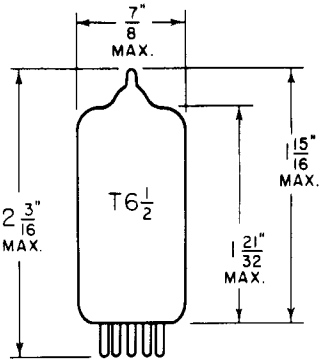
CHARACTERISTICS

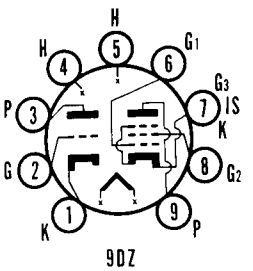
	Triode	Pentode	
Plate Supply Voltage	200	200	Volts
Grid No. 2 Supply Voltage		150	Volts
Grid No. 1 Voltage	-6		Volts
Cathode Bias Resistor		180	Ohms
Plate Current	13	9.5	Ma
Grid No. 2 Current		2.8	Ma
Amplification Factor	19		
Plate Resistance (approx.)	5750	300,000	Ohms
Transconductance	3300	6200	μmhos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





9DZ

SYLVANIA ELECTRIC PRODUCTS INC.

RADIO TUBE DIVISION
EMPORIUM, PA.

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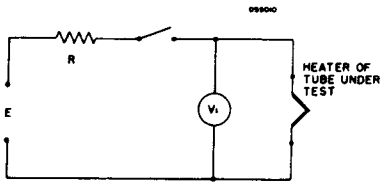
NOTES:

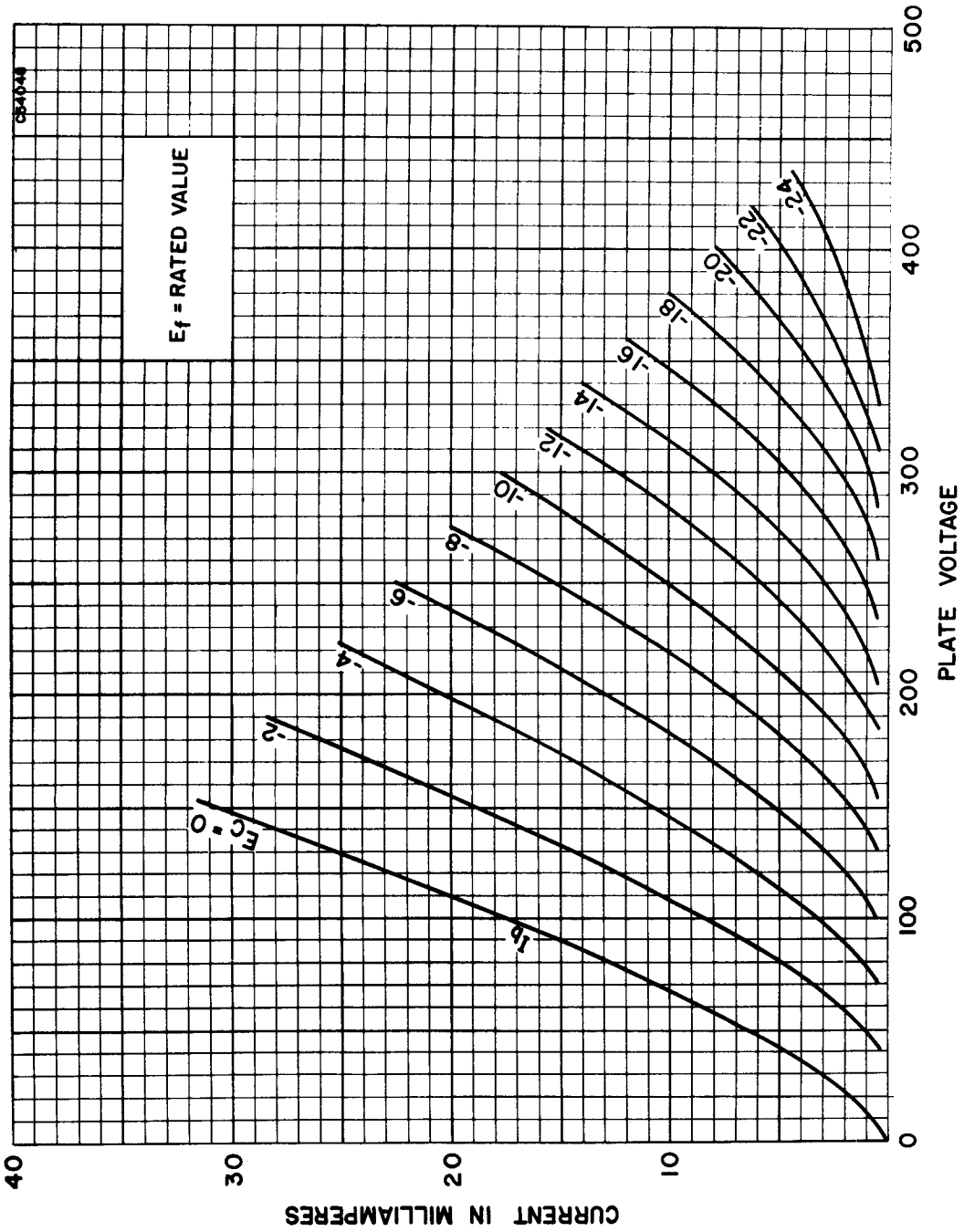
1. *Heater Warm-up Time is defined as the time required in the circuit shown below for the voltage across the heater terminals to increase from zero to the heater test voltage (V1). The conditions used in conjunction with the test circuit depend upon the rated heater voltage and current of the tube under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



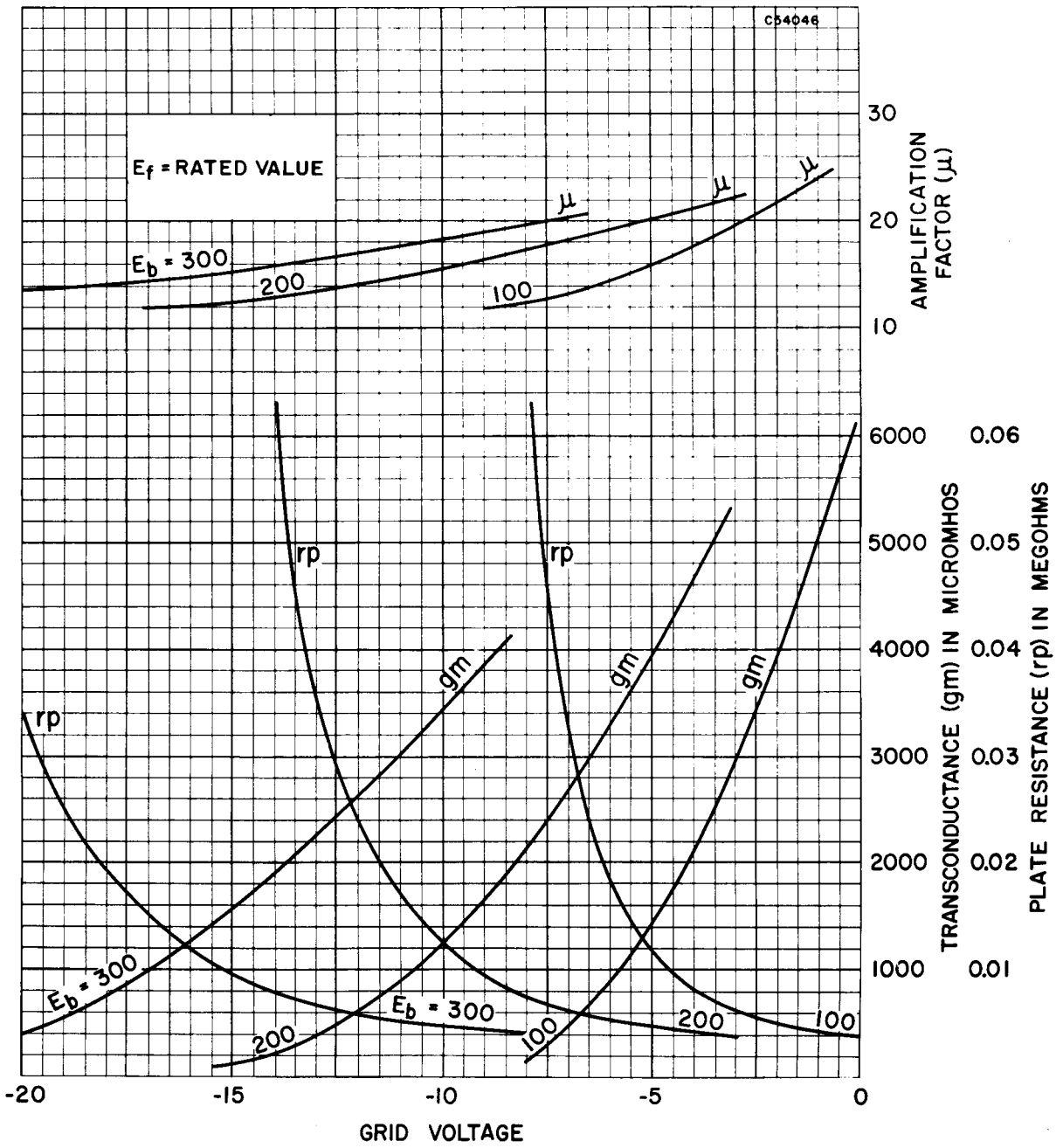
E — Applied Voltage, RMS or DC
R — Total Series Resistance
V1 — Heater Test Voltage, RMS or DC (80% Rated Heater Voltage)

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

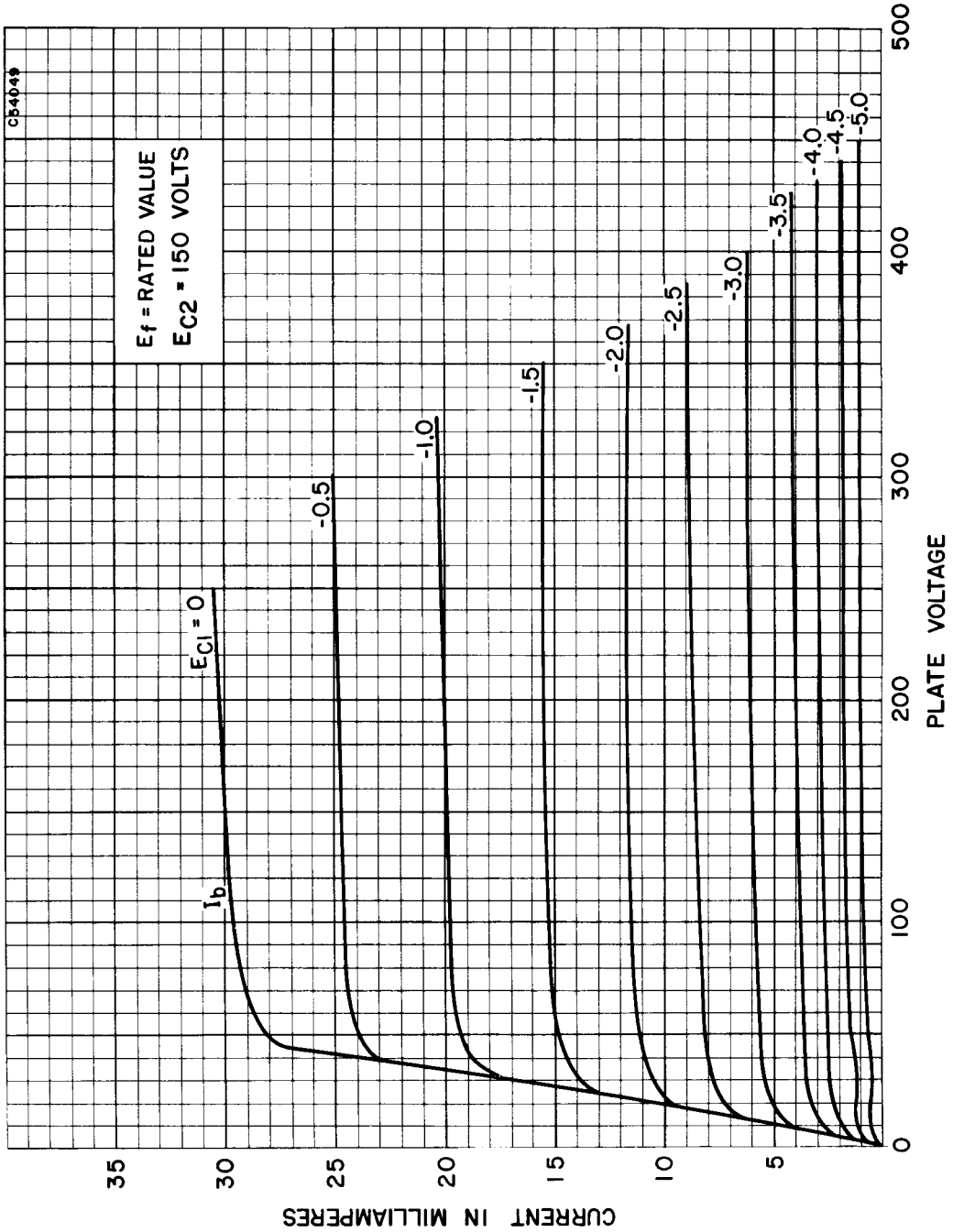
AVERAGE PLATE CHARACTERISTICS
TRIODE SECTION



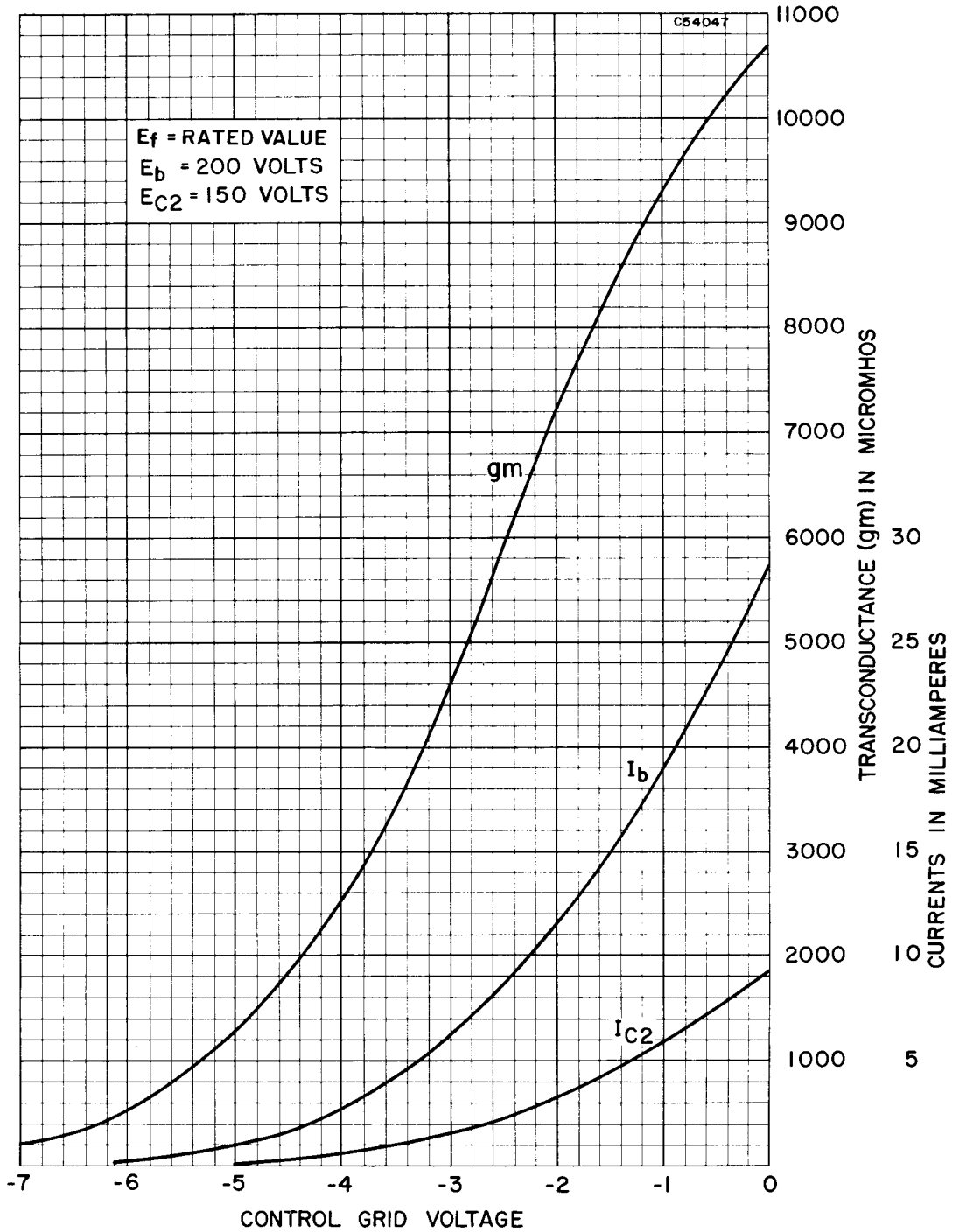
AVERAGE TRANSFER CHARACTERISTICS
TRIODE SECTION



AVERAGE PLATE CHARACTERISTICS
PENTODE SECTION



AVERAGE TRANSFER CHARACTERISTICS
PENTODE SECTION



RATING CURVE