

MECHANICAL DATA

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

ELECTRICAL DATA

HEATER CHARACTERISTICS

	5CM8	6CM8	
Heater Voltage	4.7	6.3	Volts
Heater Current	600	450	Ma
Heater Warm-up Time ¹	11	11	Seconds
Heater-Cathode Voltage (Design Center Values)			
Heater Negative with Respect to Cathode			
Total DC and Peak	200	200	Volts Max.
Heater Positive with Respect to Cathode			
DC	100	100	Volts Max.
Total DC and Peak	200	200	Volts Max.

DIRECT INTERELECTRODE CAPACITANCES (Approx.)

Triode Section		
Grid to Plate: (g to p)	1.9 $\mu\mu\text{f}$	
Input: g to (h + k)	1.6 $\mu\mu\text{f}$	
Output: p to (h + k)	0.22 $\mu\mu\text{f}$	
Pentode Section		
Grid No. 1 to Plate: (g1 to p)	0.02 $\mu\mu\text{f}$	Max.
Input: g1 to (h+k+g2+g3+I.S.)	6.0 $\mu\mu\text{f}$	
Output: p to (h+k+g2+g3+I.S.)	2.6 $\mu\mu\text{f}$	
Coupling		
Pentode Plate to Triode Grid	0.01 $\mu\mu\text{f}$	Max.
Pentode Grid No. 1 to Triode Plate	0.15 $\mu\mu\text{f}$	Max.
Pentode Plate to Triode Plate	0.10 $\mu\mu\text{f}$	Max.

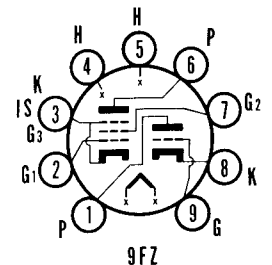
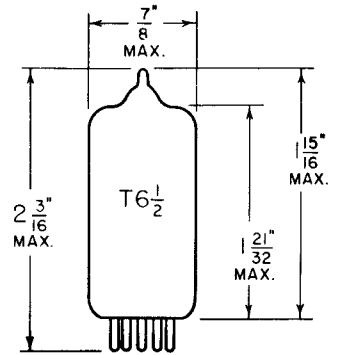
RATINGS (Design Center Values)

	Triode	Pentode	
Plate Voltage	300	300	Volts Max.
Grid No. 2 Supply Voltage		300	Volts Max.
Grid No. 2 Voltage	See Rating Chart		
Positive Grid No. 1 Voltage	0	0	Volts Max.
Plate Dissipation	1.0	2.0	Watts Max.
Grid No. 2 Dissipation		0.5	Watt Max.
Grid No. 1 Circuit Resistance			
Self Bias		1.0	Megohm Max.
Fixed Bias		0.25	Megohm Max.

QUICK REFERENCE DATA

The Sylvania Type 6CM8 is a high μ triode and sharp cut-off pentode. The pentode section may be used as an IF amplifier, video amplifier, AGC amplifier and reactance tube.

The 5CM8 is identical to the 6CM8 except for heater characteristics. Both types employ controlled heater warm-up time for services in series heater string television receivers.



SYLVANIA ELECTRIC PRODUCTS INC.
RADIO TUBE DIVISION
EMPORIUM, PA.

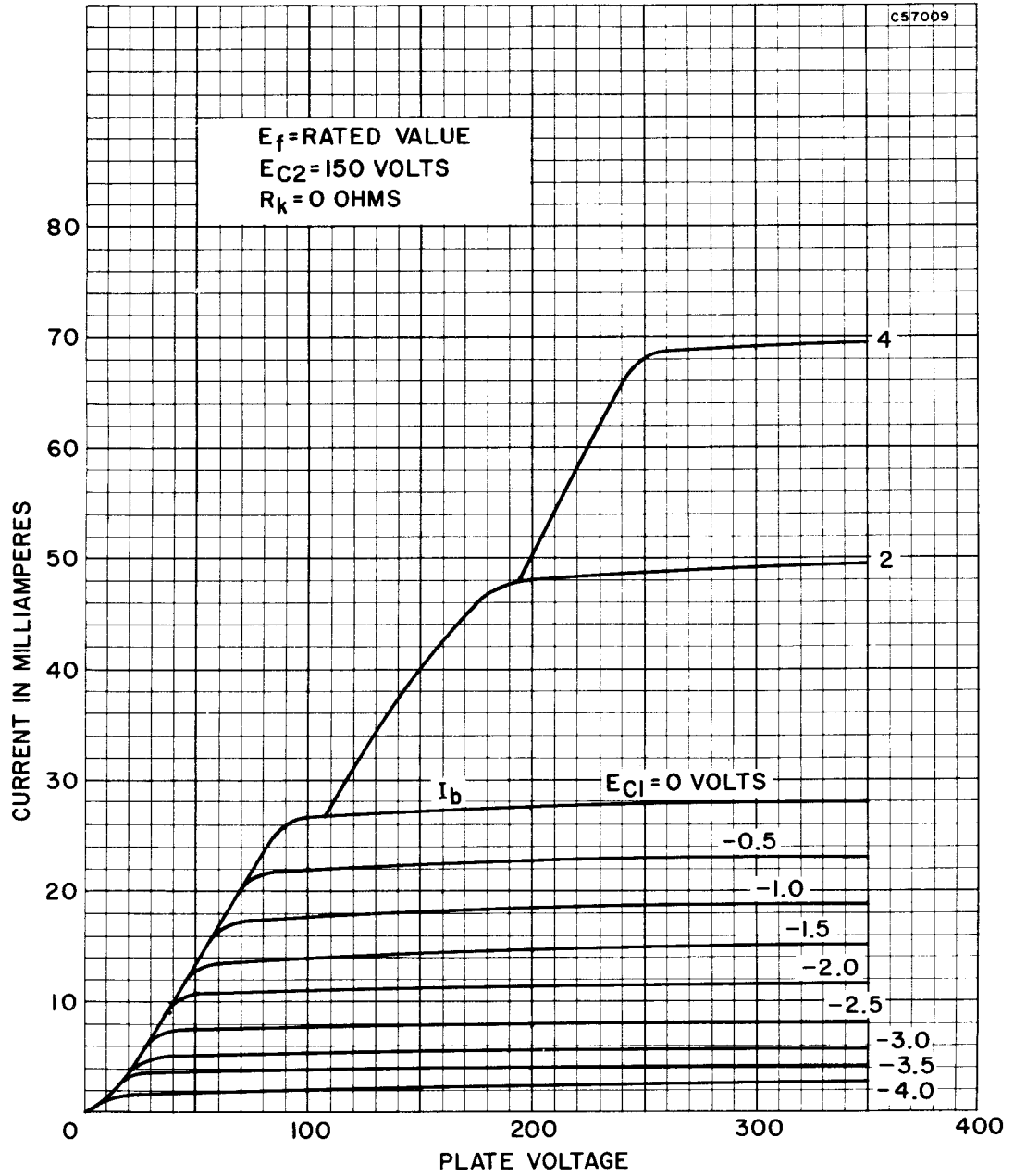
CHARACTERISTICS Class A₁ Amplifier

	Triode	Pentode
Plate Supply Voltage	250	200 Volts
Grid No. 2 Voltage		150 Volts
Grid No. 1 Voltage	-2	0 Volts
Cathode Bias Resistor		180 Ohms
Plate Current	1.8	9.5 Ma
Grid No. 2 Current		2.8 Ma
Amplification Factor	100	
Plate Resistance (approx.)	50,000	600,000 Ohms
Transconductance	2000	6200 μ mhos
Grid No. 1 Voltage for $I_b = 10 \mu a$ (approx.)		-8 Volts

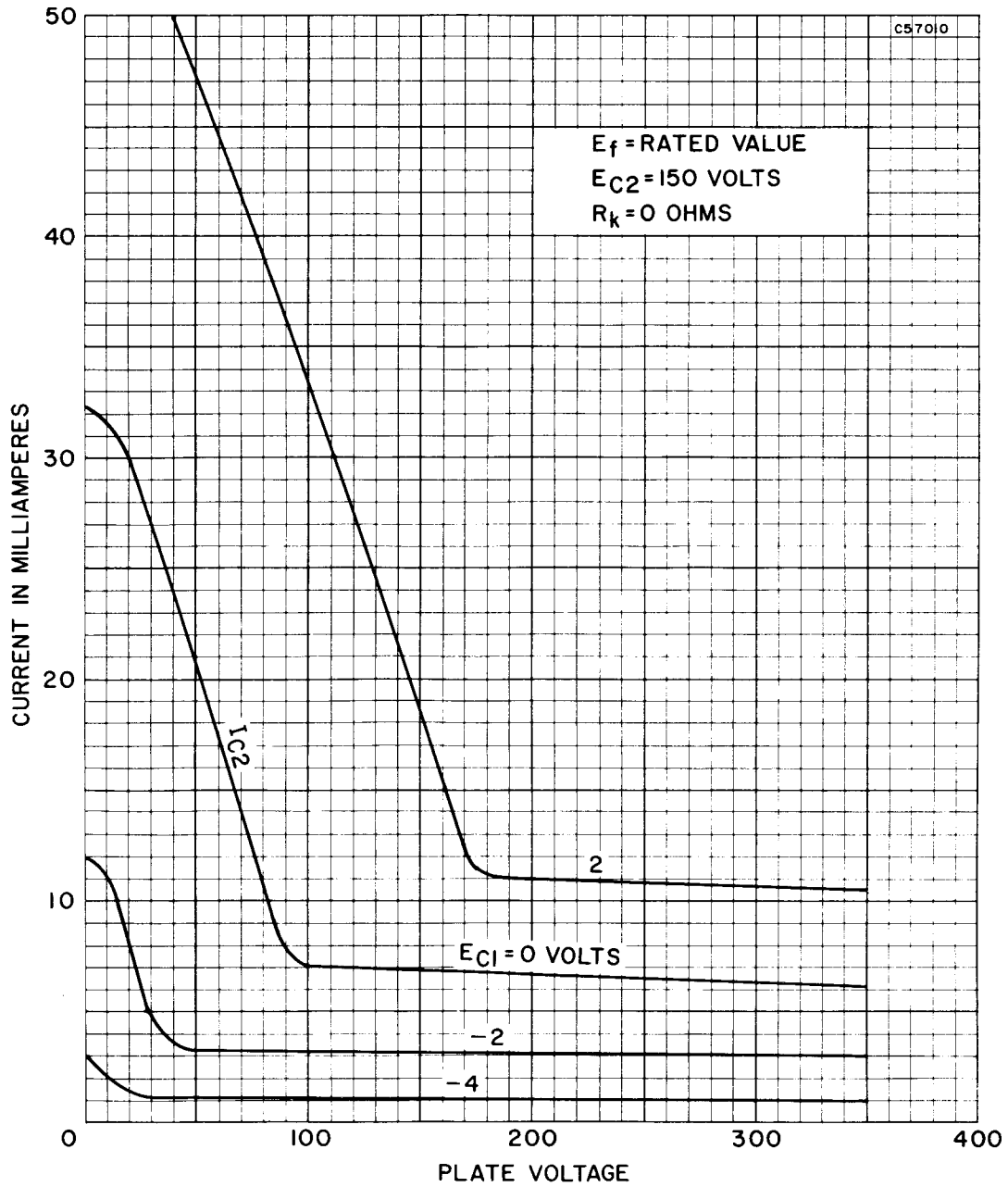
NOTE:

1. Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of its rated value after applying four (4) times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to three (3) times rated heater voltage divided by rated heater current.

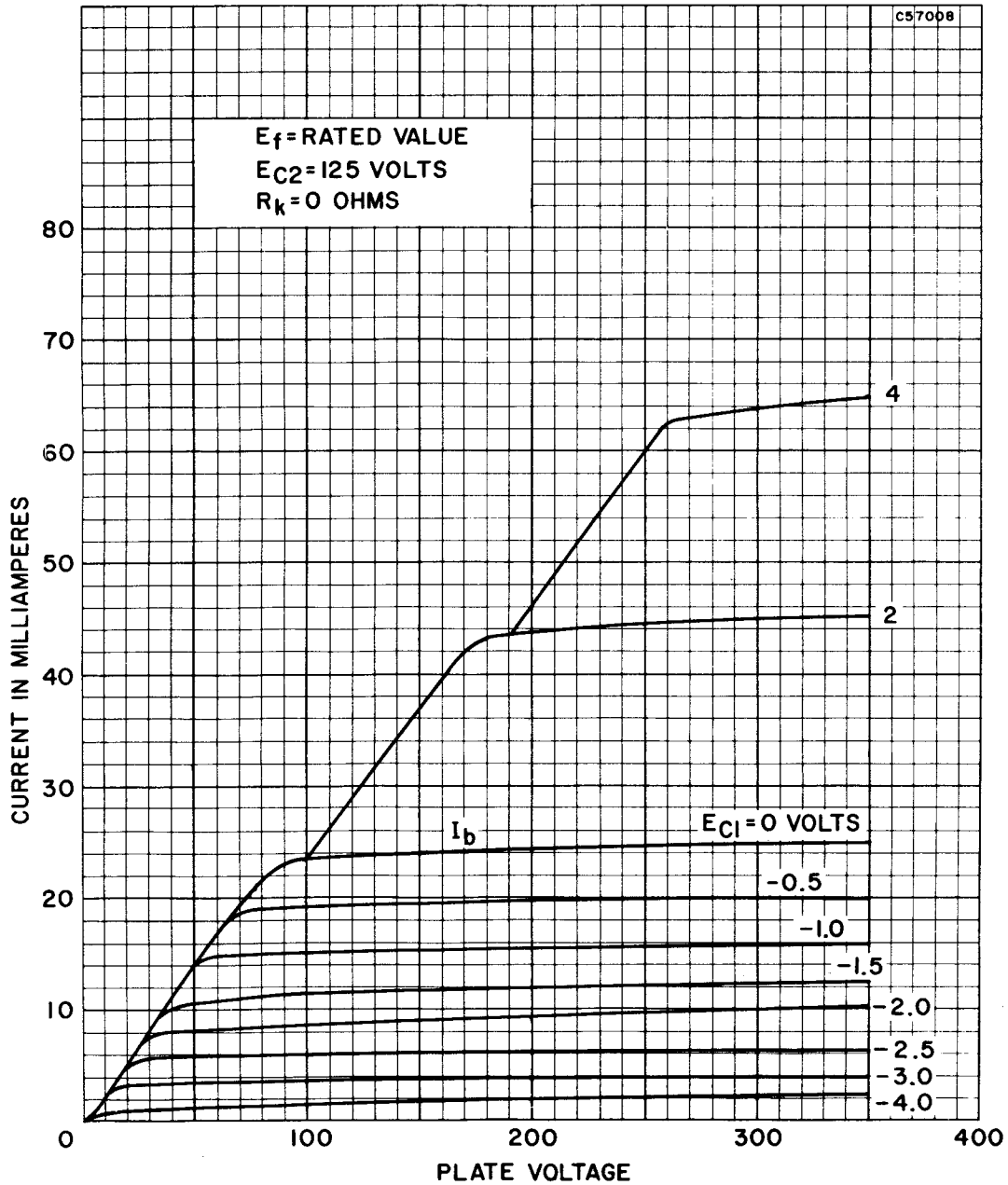
AVERAGE PLATE CHARACTERISTICS
(PENTODE SECTION)



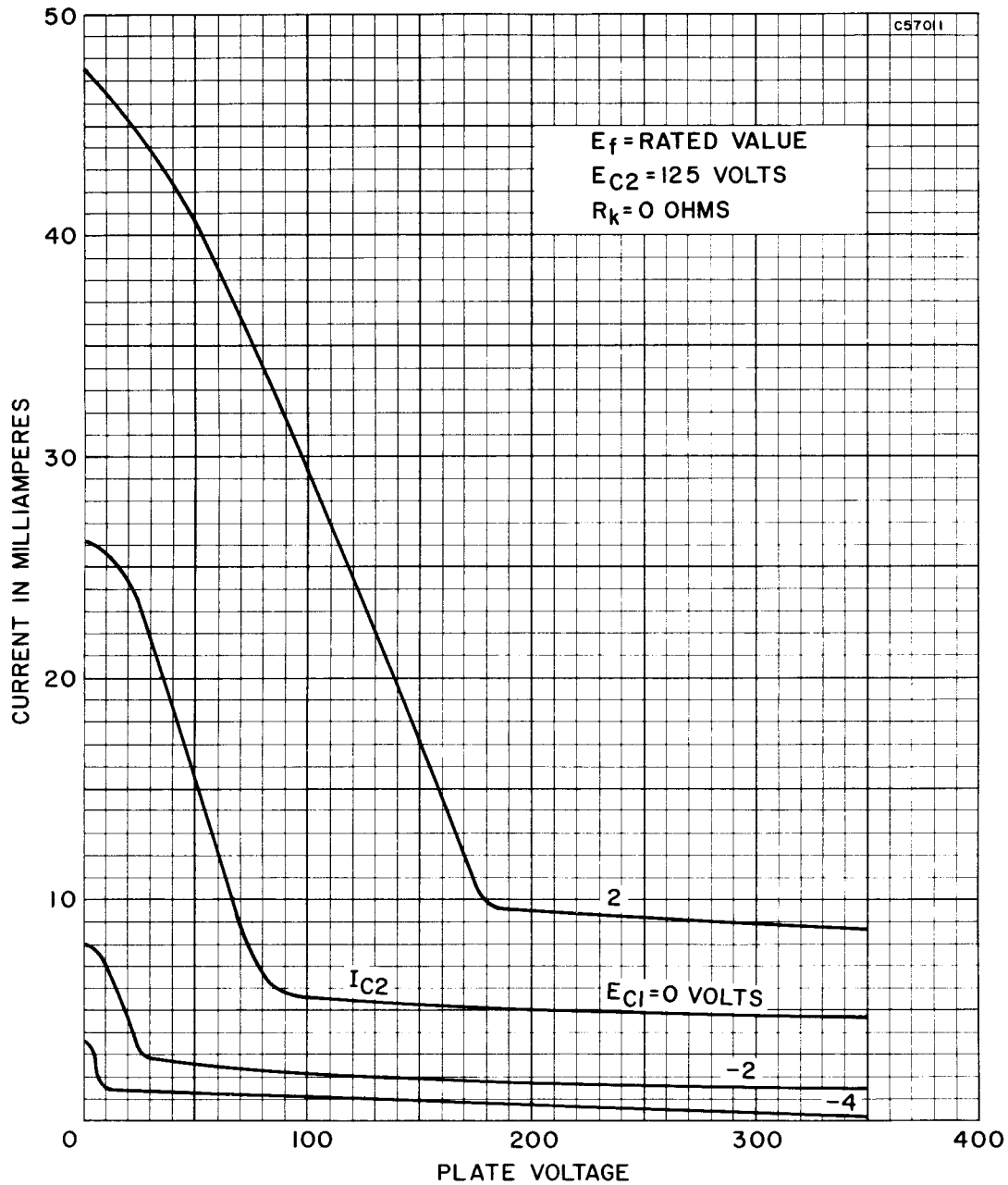
AVERAGE SCREEN CHARACTERISTICS
(PENTODE SECTION)



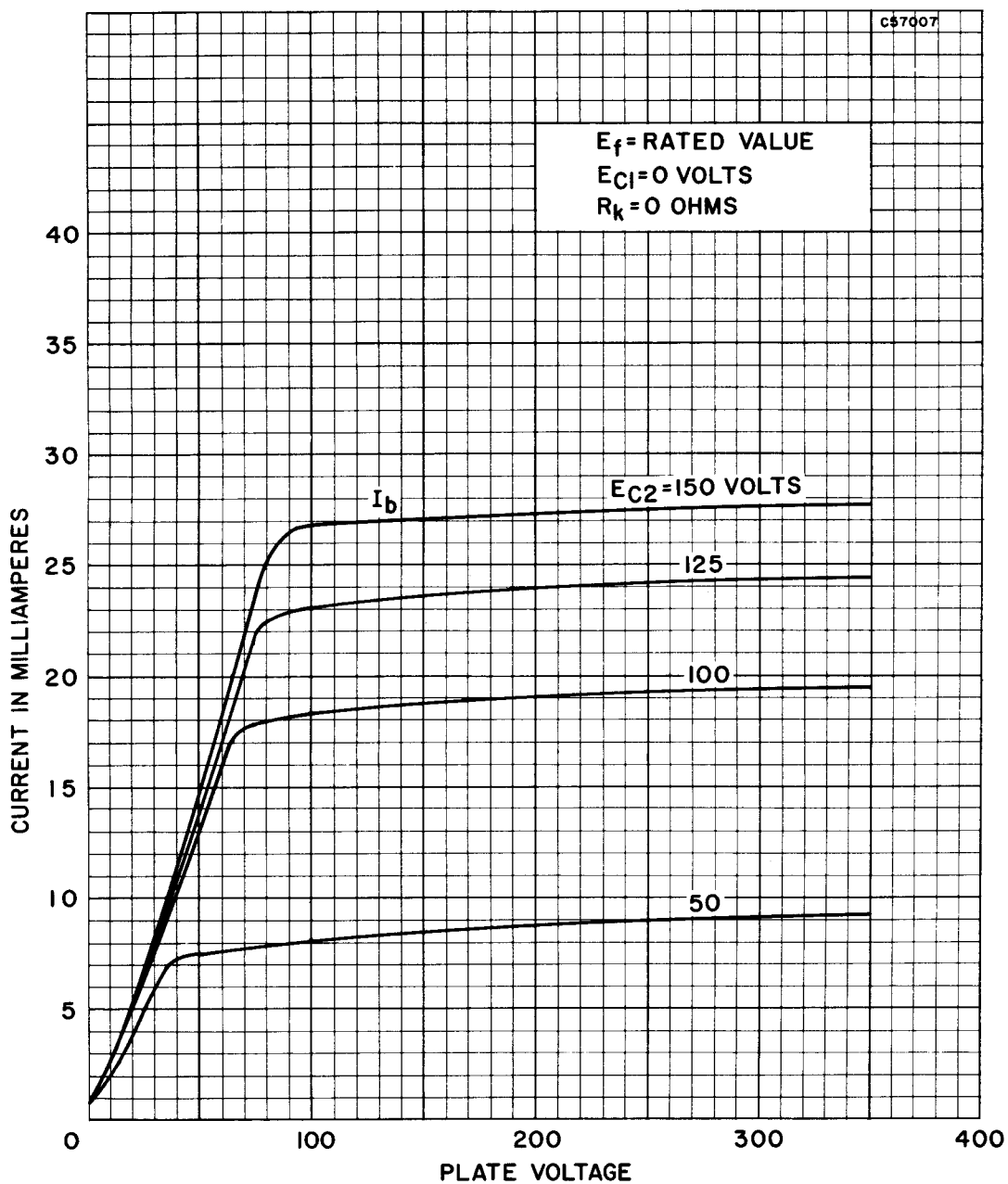
AVERAGE PLATE CHARACTERISTICS
(PENTODE SECTION)



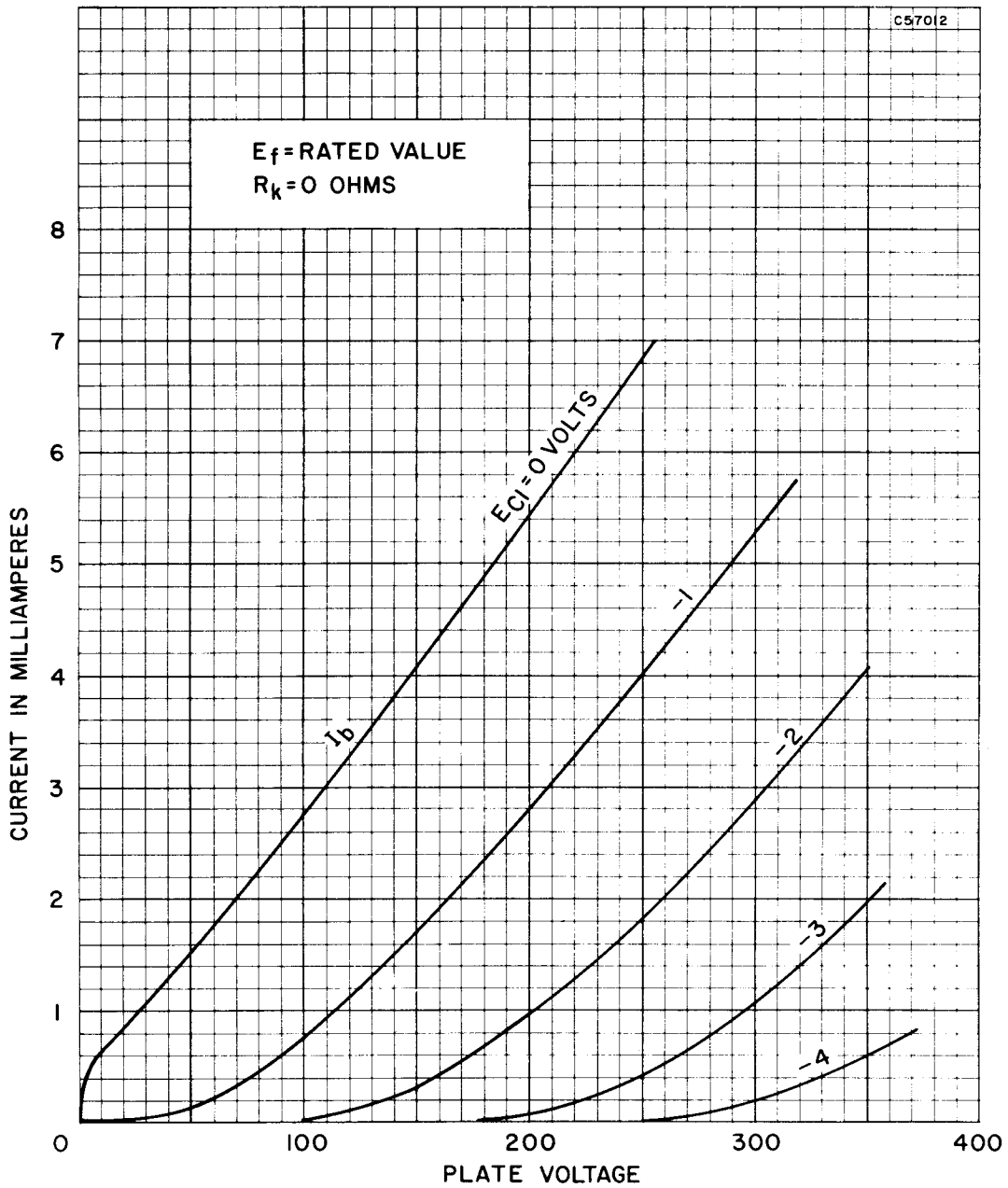
AVERAGE SCREEN CHARACTERISTICS
(PENTODE SECTION)



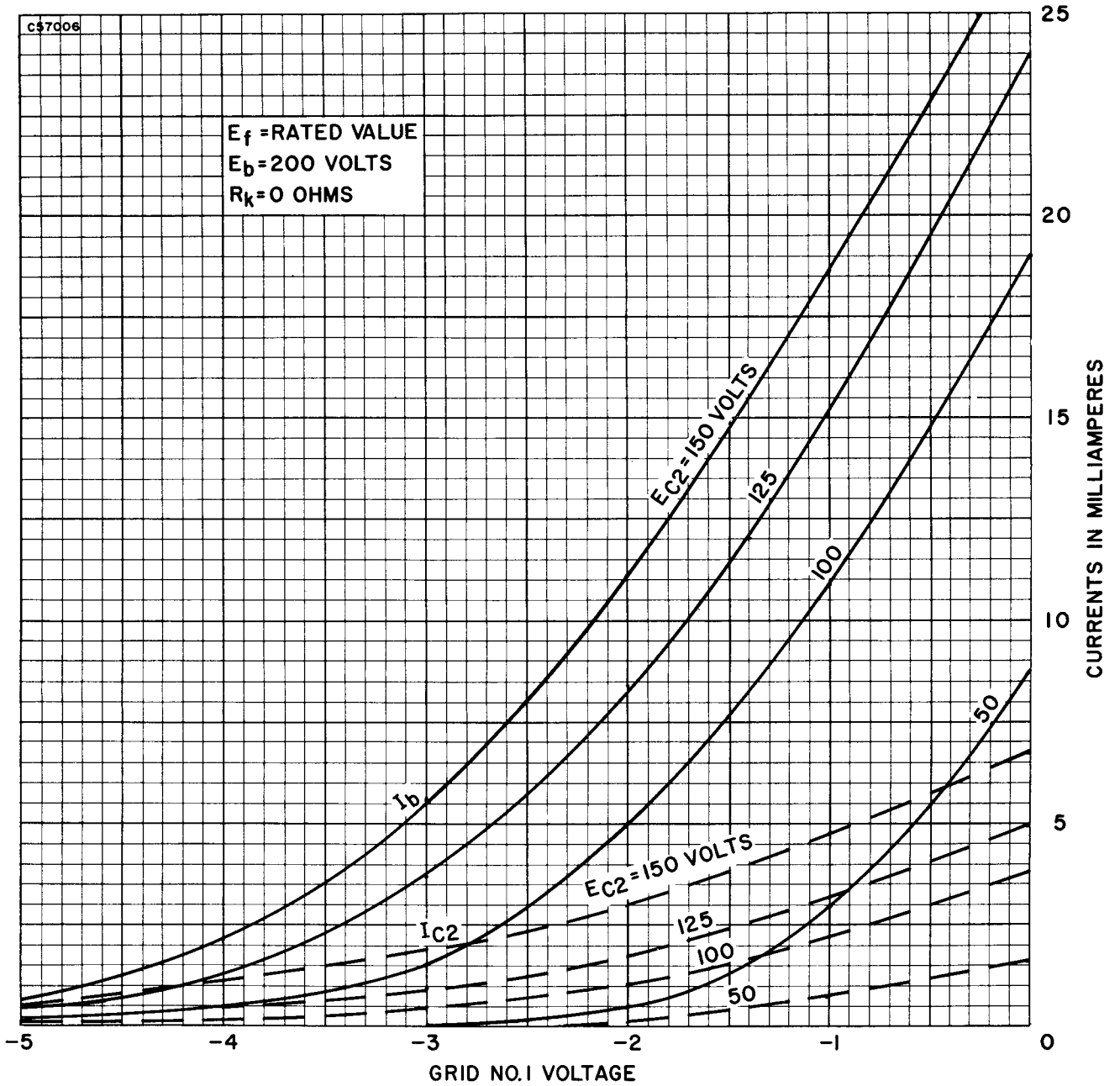
AVERAGE PLATE CHARACTERISTICS
(PENTODE SECTION)



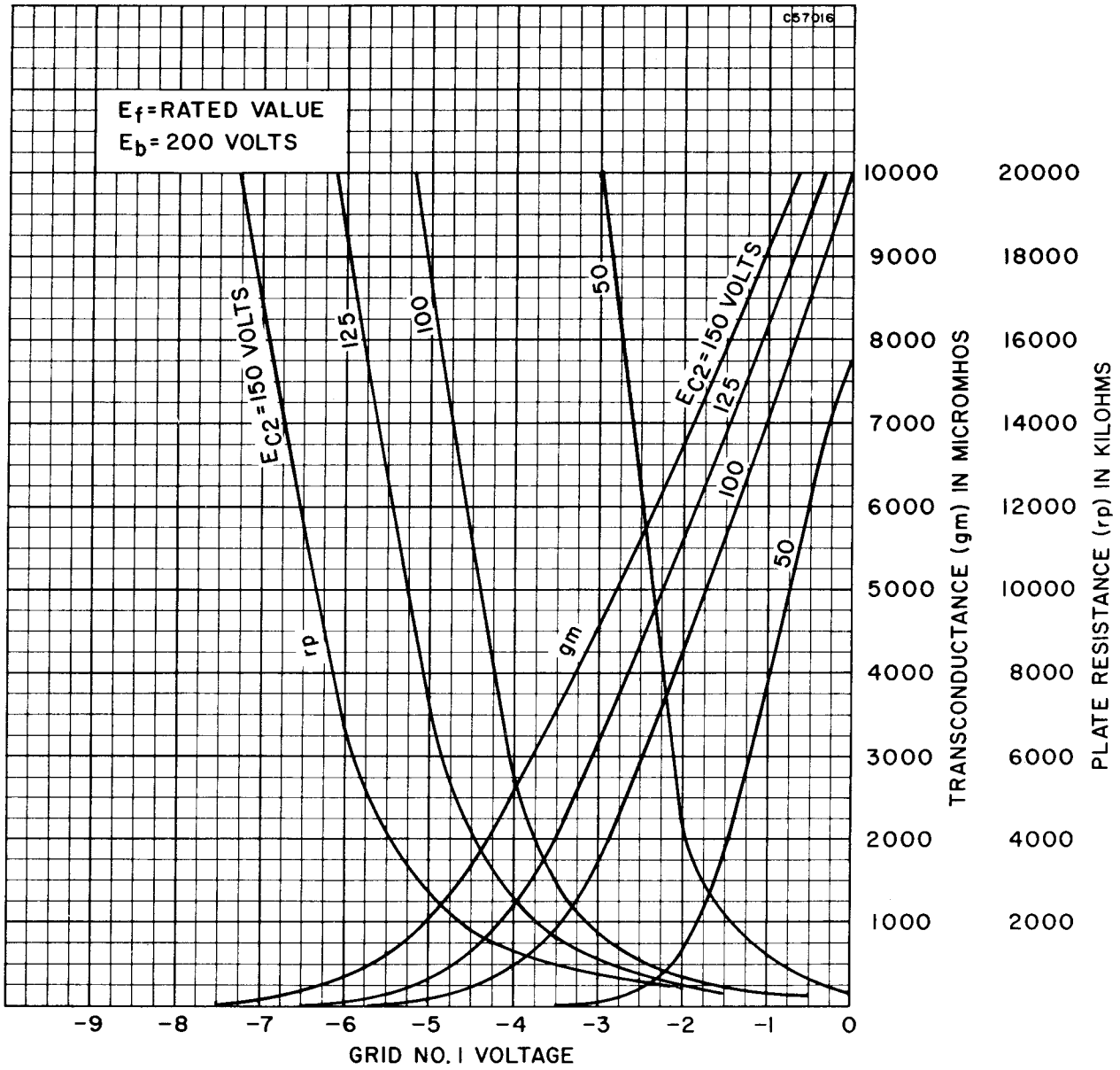
AVERAGE PLATE CHARACTERISTICS
(TRIODE SECTION)



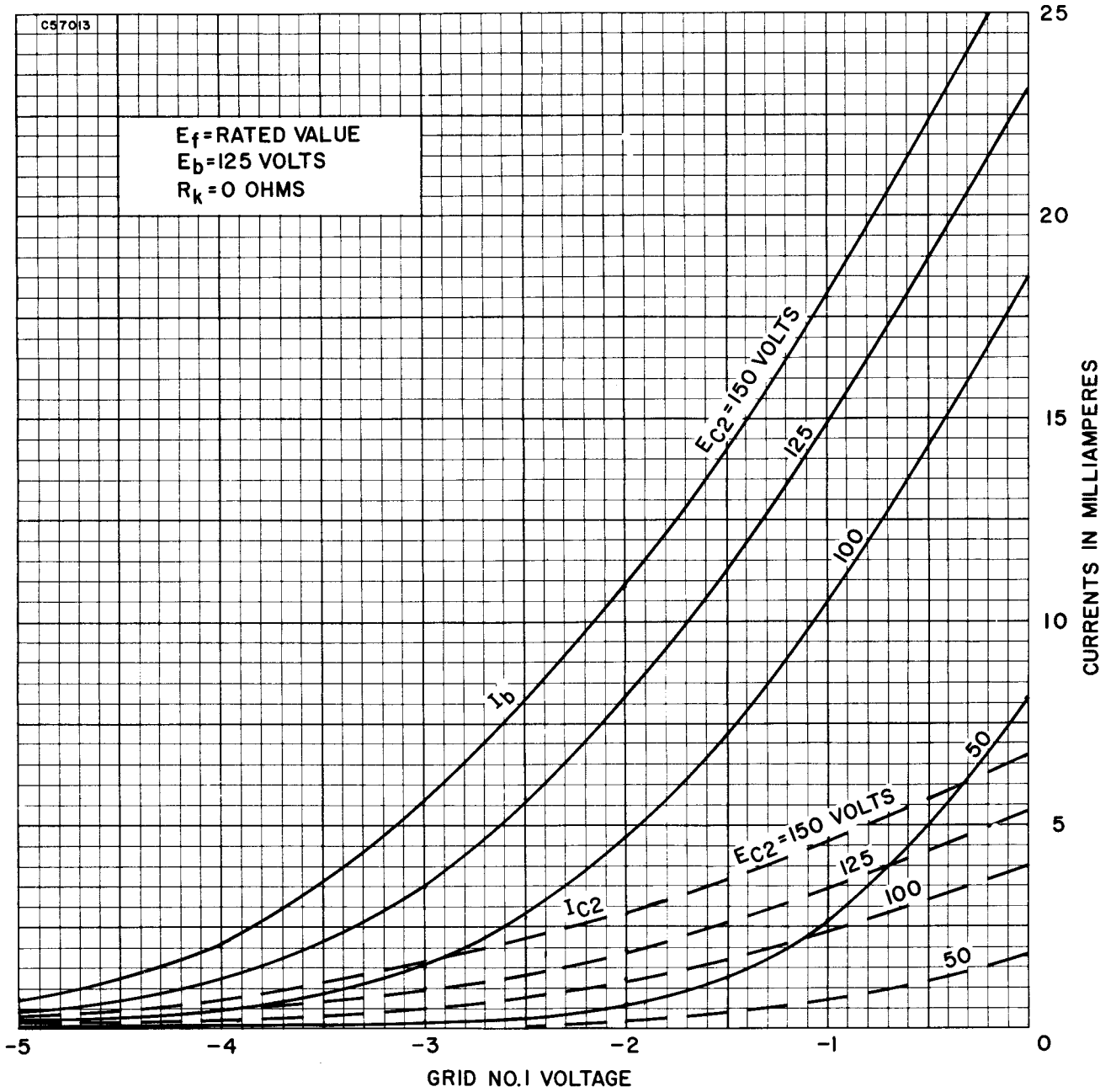
AVERAGE TRANSFER CHARACTERISTICS
(PENTODE SECTION)



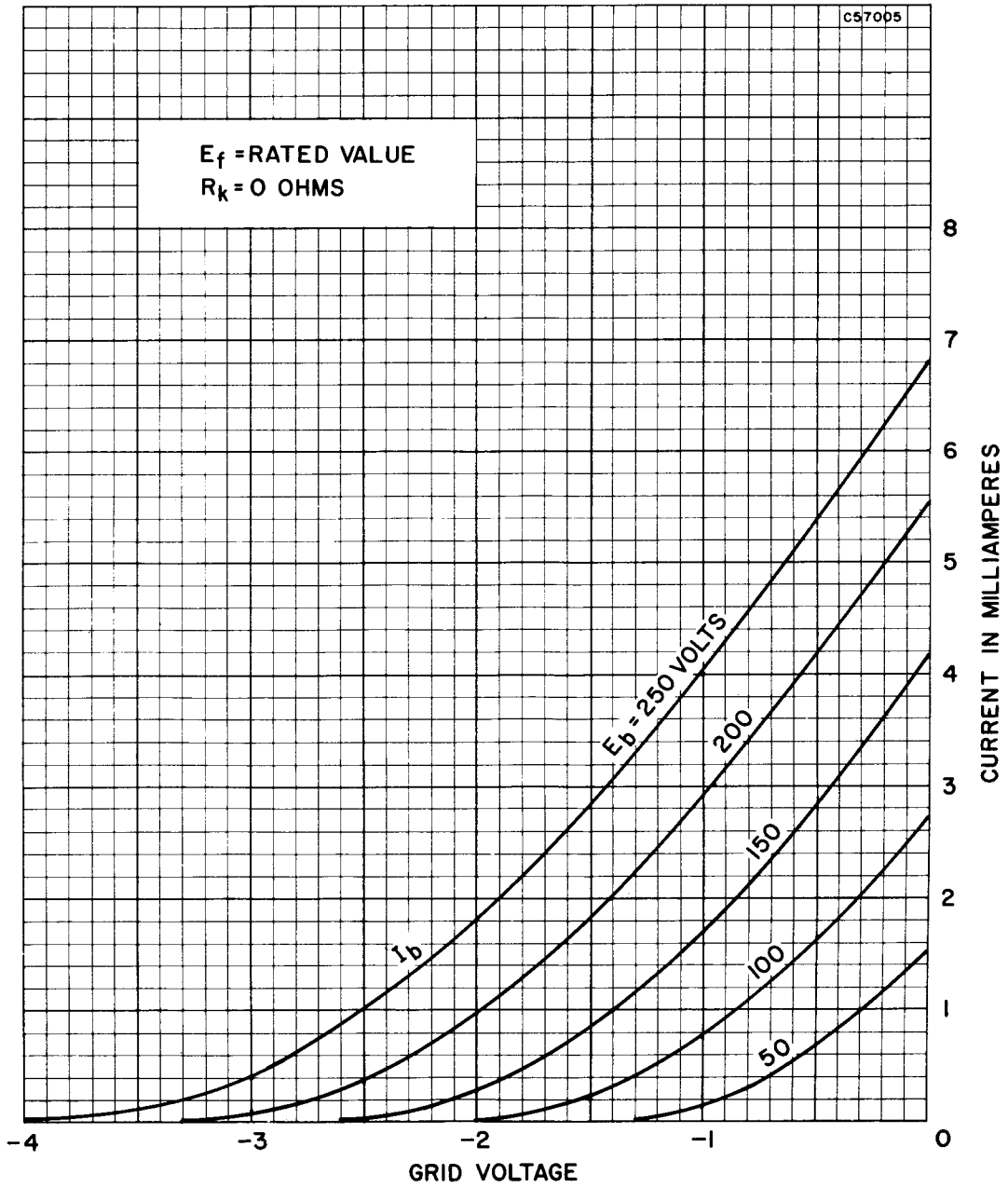
AVERAGE TRANSFER CHARACTERISTICS
(PENTODE SECTION)



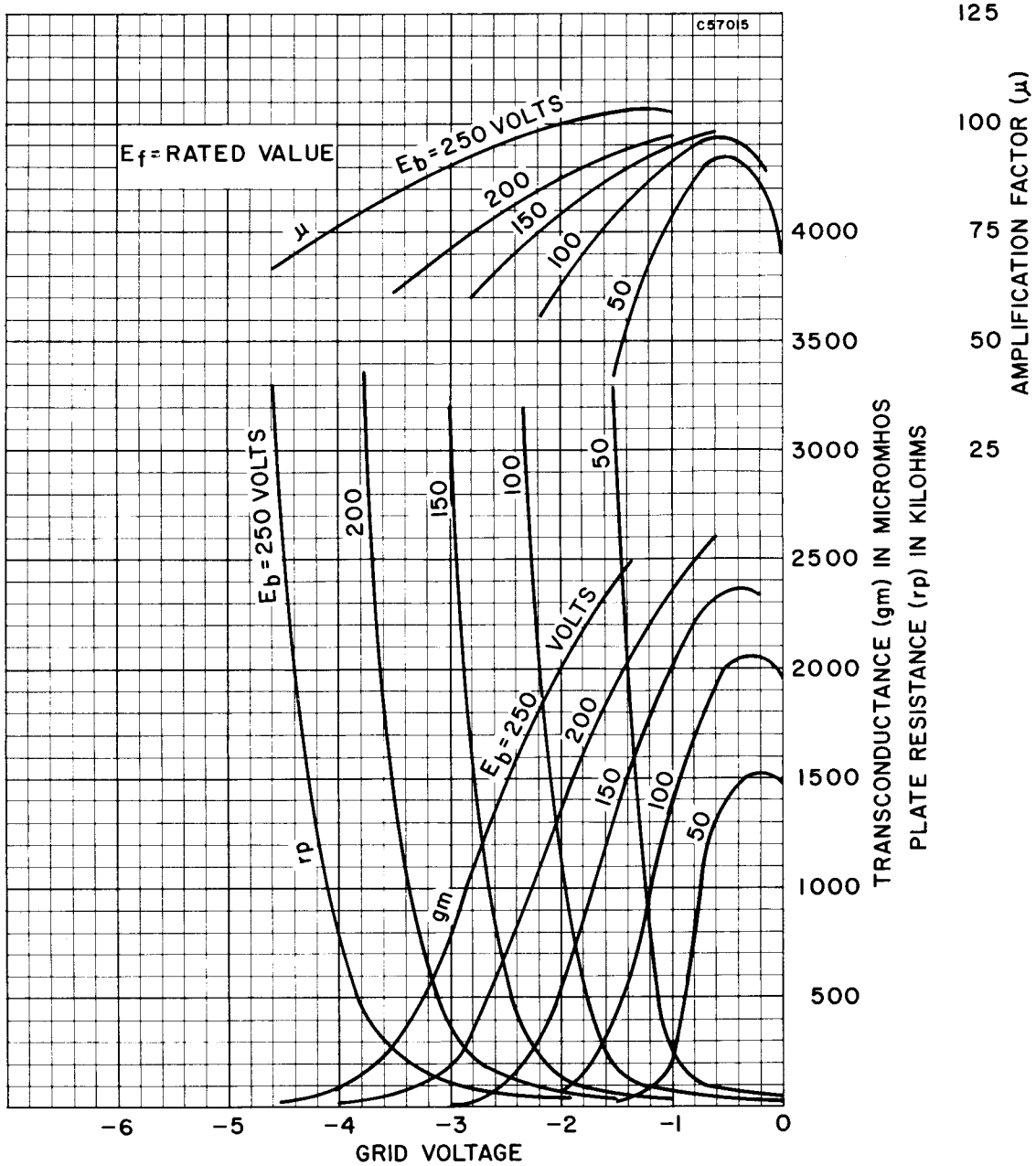
AVERAGE TRANSFER CHARACTERISTICS
(PENTODE SECTION)



AVERAGE TRANSFER CHARACTERISTICS
(TRIODE SECTION)



AVERAGE TRANSFER CHARACTERISTICS
(TRIODE SECTION)



RATING CHART

