

## MECHANICAL DATA

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

## ELECTRICAL DATA

### HEATER CHARACTERISTICS

	12DJ8	7DJ8	6DJ8	
Heater Voltage	12.6	7.0	6.3	Volts
Heater Current	180	300	365	Ma
Heater-Cathode Voltage (Design Center Values)				
RMS, Voltage between Cathode and Heater (Grounded Cathode Section)	50	80	50	Volts Max.
DC Component of Cathode to Heater Voltage (Grounded Grid Section)	130	130	130	Volts Max.
Peak Voltage between Cathode and Heater; Cathode Positive with Respect to Heater (Grounded Grid Section)	150	180	150	Volts Max.

### DIRECT INTERELECTRODE CAPACITANCES

	Unshielded	Shielded	
Grounded-Cathode Section <sup>1</sup>			
Grid to All Elements except Plate	3.3	3.3	pf
Plate to All Elements except Grid	1.8	2.5	pf
Plate to Grid	1.4	1.4	pf
Grid to Heater	0.13	0.13	pf
Grounded-Grid Section <sup>1</sup>			
Cathode to all Elements except Plate	6.0	6.0	pf
Plate to all Elements except Cathode	2.8	3.7	pf
Plate to Grid	1.4	1.4	pf
Cathode to Heater	2.7	2.7	pf
Plate to Cathode	0.18	0.16	pf
Plate (Grounded-Grid Section) to Plate (Grounded-Cathode Section)	.045	0.15	pf Max.
Grid (Grounded-Cathode Section) to Plate (Grounded-Grid Section)	.005	.005	pf Max.

### RATINGS (Design Center Values—Each Section)

Plate Supply Voltage (Ib = 0 Ma)	550 Volts	Max.
Plate Voltage <sup>2</sup>	130 Volts	Max.
Plate Dissipation	1.8 Watts	Max.
Cathode Current	25 Ma	Max.
Negative Grid Voltage	50 Volts	Max.
Grid Circuit Resistance	1.0 Megohm	Max.

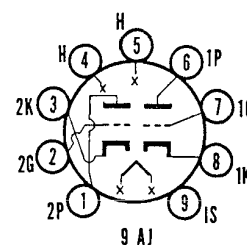
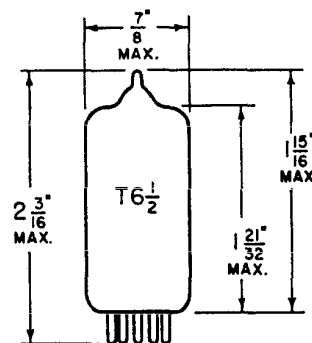
### CHARACTERISTICS

#### Class A1 Amplifier (Each Section)

Plate Voltage	90 Volts
Grid Voltage	-1.3 Volts
Plate Current	15 Ma
Transconductance	12,500 $\mu$ mhos
Amplification Factor	33
Equivalent Noise Resistance	300 Ohms

## QUICK REFERENCE DATA

Sylvania Types 6DJ8, 7DJ8 and 12DJ8 are double triodes designed for VHF cascode amplifier service. Special design features are frame-grid construction, very high transconductance, low capacitances and low noise figures.



## SYLVANIA ELECTRONIC TUBES

A Division of  
Sylvania Electric Products Inc.

### RECEIVING TUBE OPERATIONS

### EMPORIUM, PA.

Prepared and Released By The  
TECHNICAL PUBLICATIONS SECTION  
EMPORIUM, PENNSYLVANIA

JUNE, 1963

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File Under  
RECEIVING TUBES

SYLVANIA

6DJ8

7DJ8

12DJ8

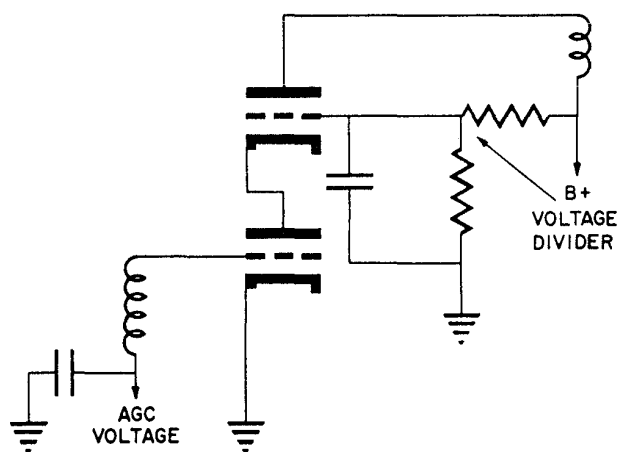
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NOTES:

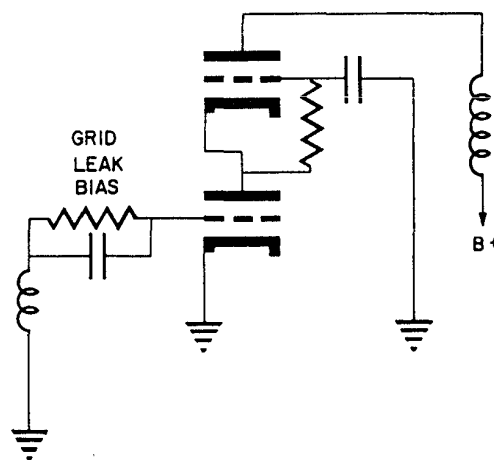
1. Grounded-cathode section (Section No. 1) connects to Pins 6, 7, and 8. Grounded-grid section (Section No. 2) connects to Pins 1, 2, and 3.
2. In order not to exceed the maximum permissible plate voltage when the cascode amplifier has AGC voltage applied to it, a voltage divider is recommended for the grid of the grounded-grid section (Circuit A).

With grid current biasing for the grounded-cathode section, the plate voltage across this section should not exceed 75 volts when an AGC voltage is not utilized (Circuit B).

CIRCUIT A

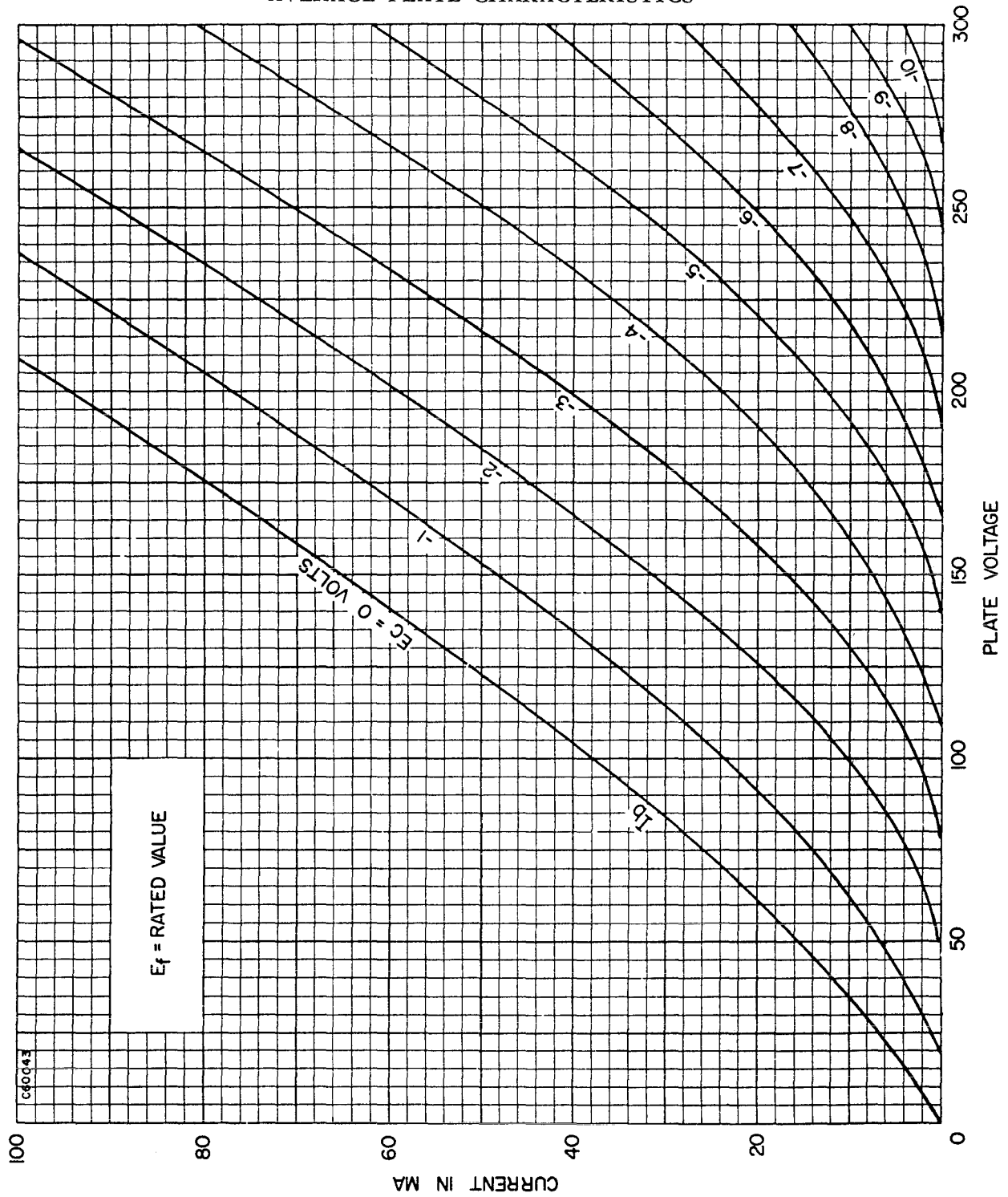


CIRCUIT B



059102

# AVERAGE PLATE CHARACTERISTICS



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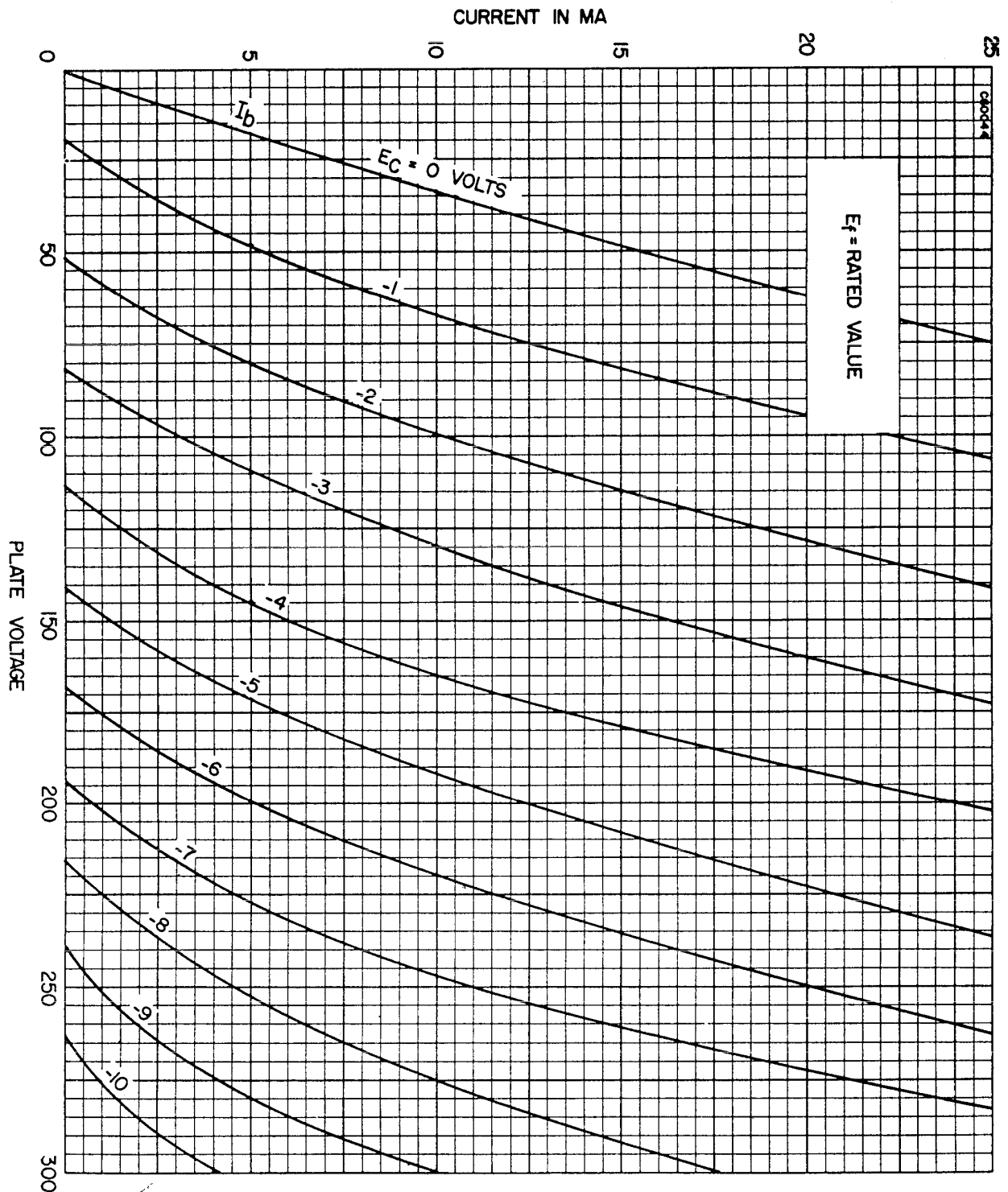
6DJ8

7DJ8

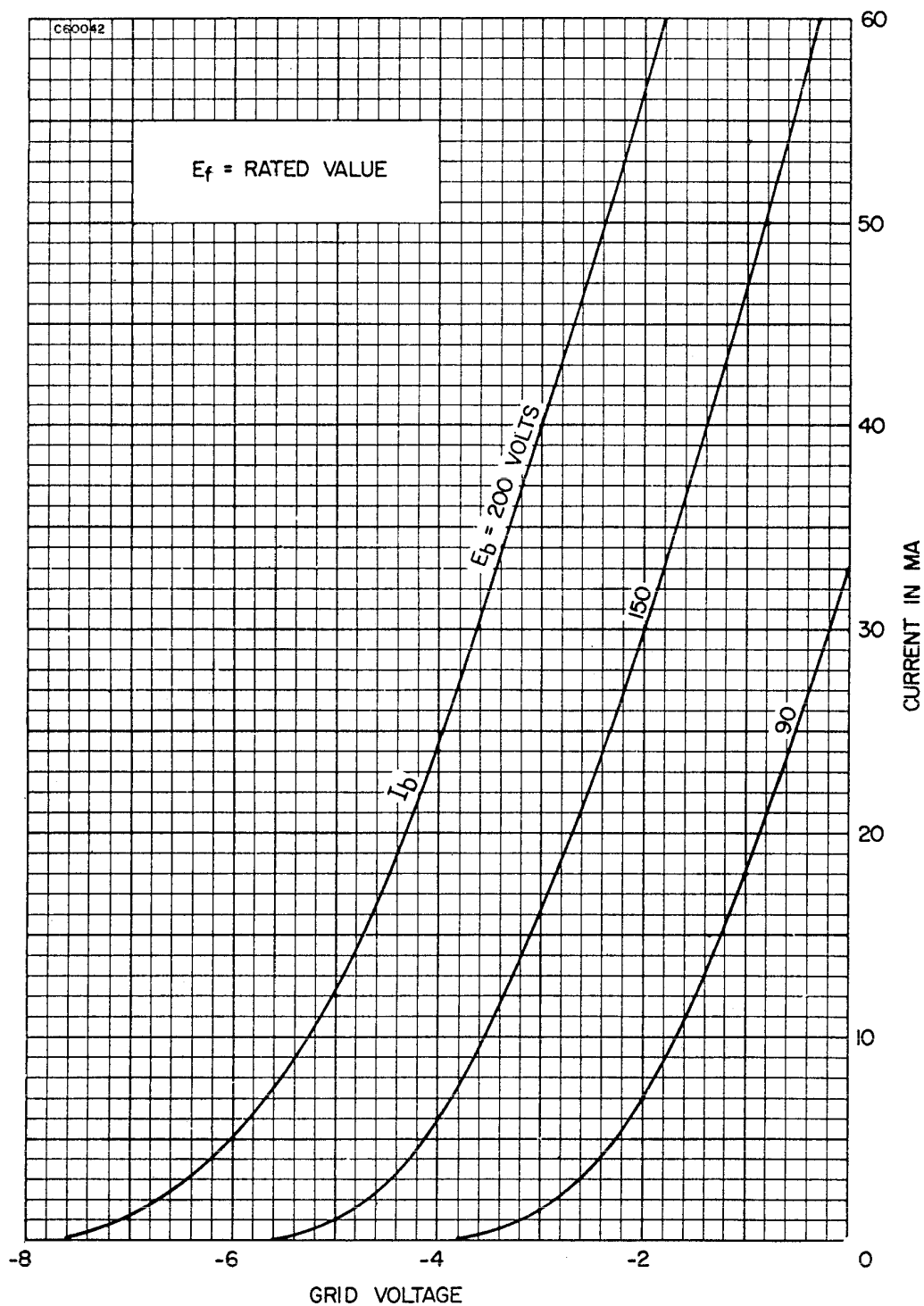
12DJ8

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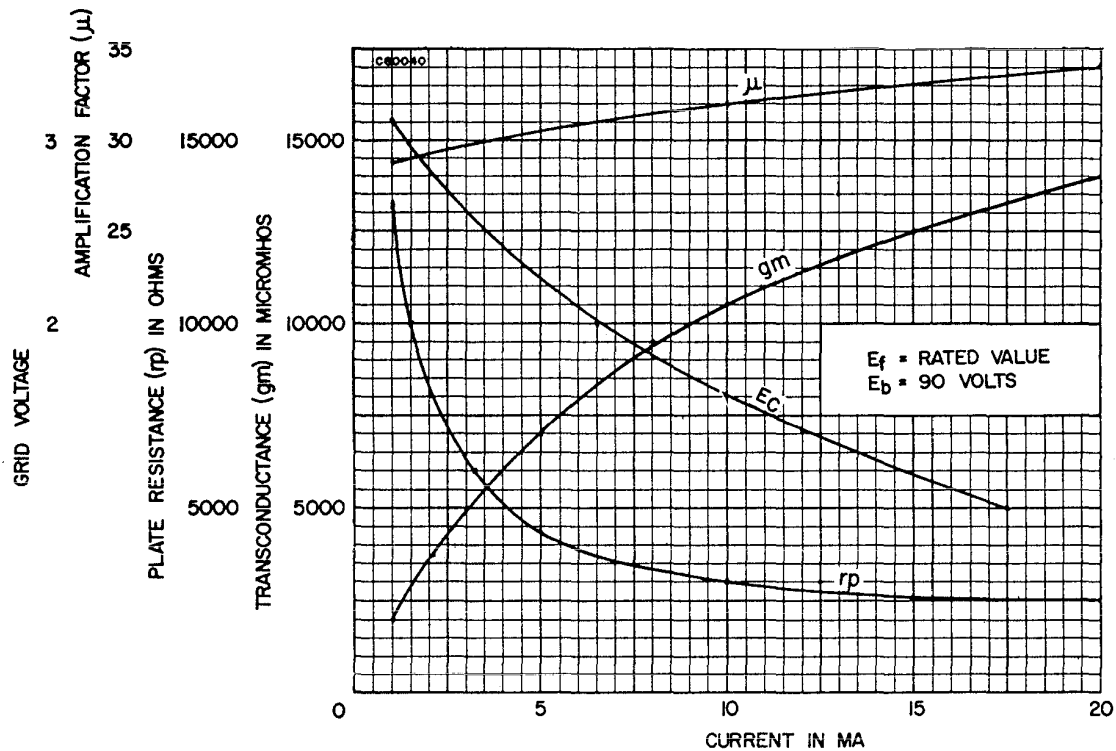
AVERAGE PLATE CHARACTERISTICS



# AVERAGE TRANSFER CHARACTERISTICS



### AVERAGE TRANSFER CHARACTERISTICS



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