

**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	
<b>Grounded-Cathode Section<sup>1</sup></b>			
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	
<b>Grounded-Grid Section<sup>1</sup></b>			
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 (I <sub>b</sub> = 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.

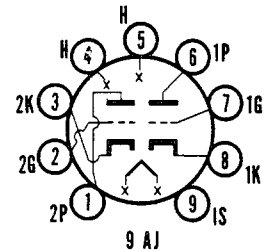
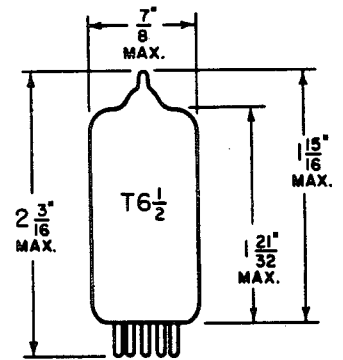
**CHARACTERISTICS**

**Class A1 Amplifier (Each Section)**

Plate Voltage	90 Volts
Grid Voltage	-1.3 Volts
Plate Current	15 Ma
Transconductance	12,500 μmhos
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.



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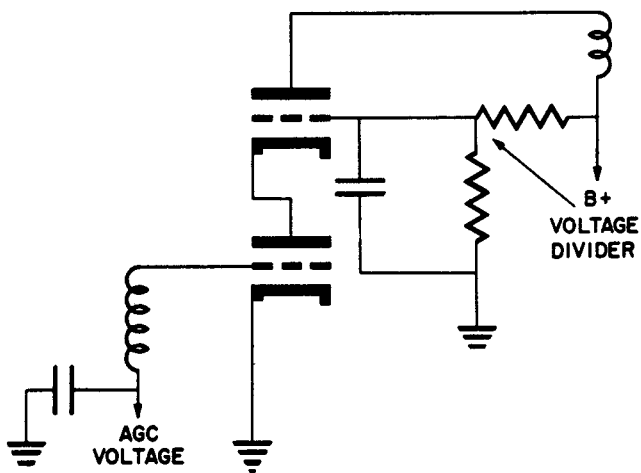
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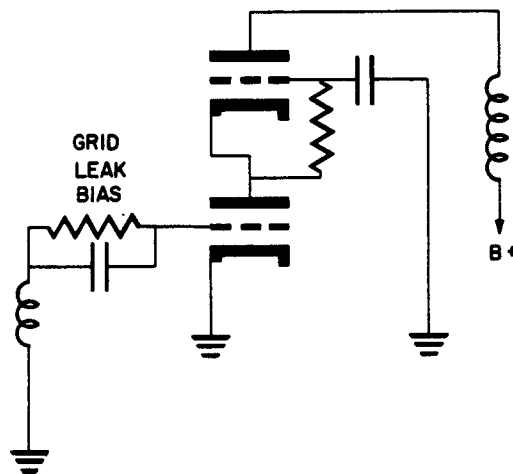
1. Grounded-cathode section (Section No. 1) connects to Pins 6, 7 and 8. Grounded-grid section (Section No. 2) connects to Pins 1, 2, and 3.
2. In order not to exceed the maximum permissible plate voltage when the cascode amplifier has AGC voltage applied to it, a voltage divider is recommended for the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

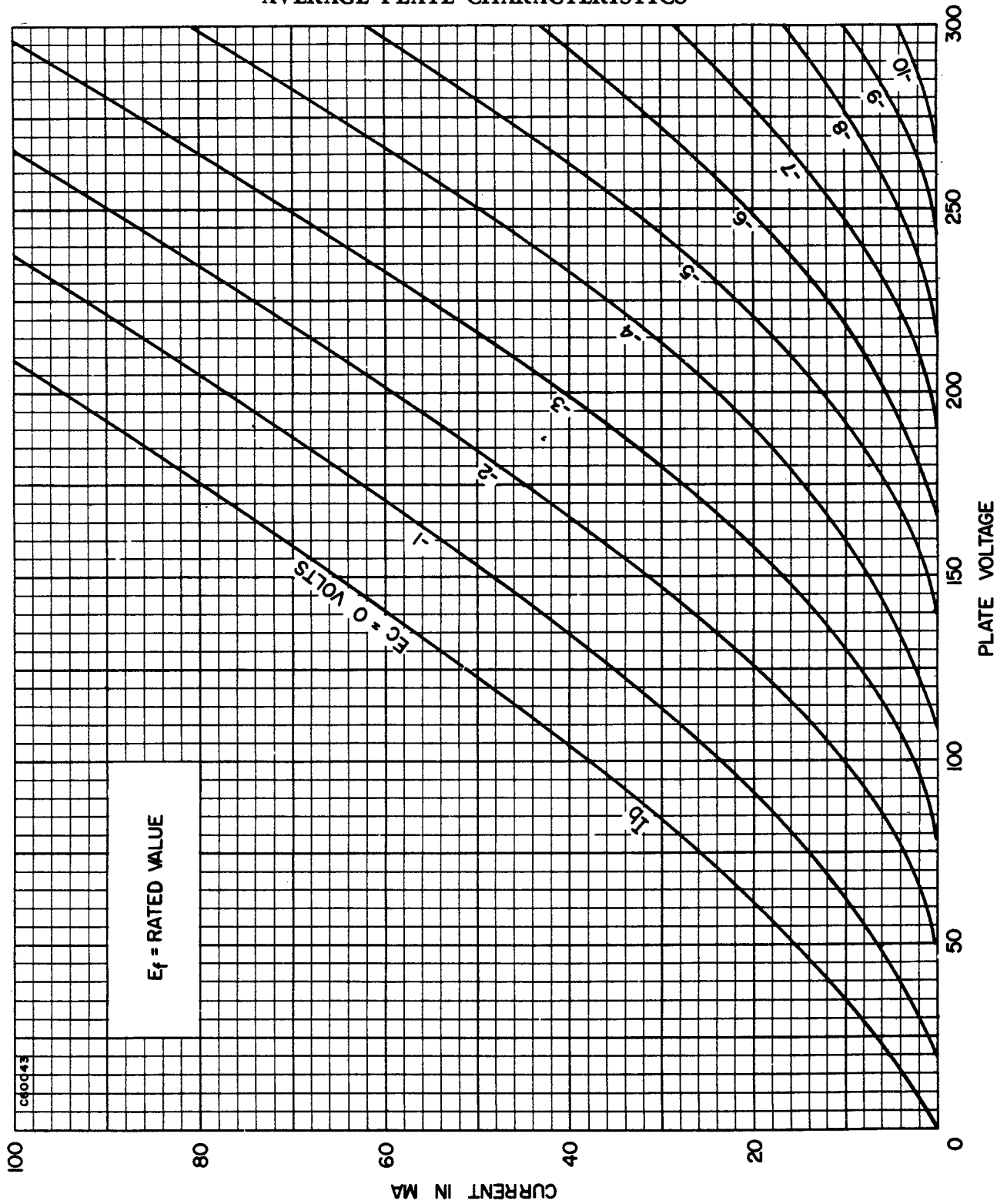


CIRCUIT B

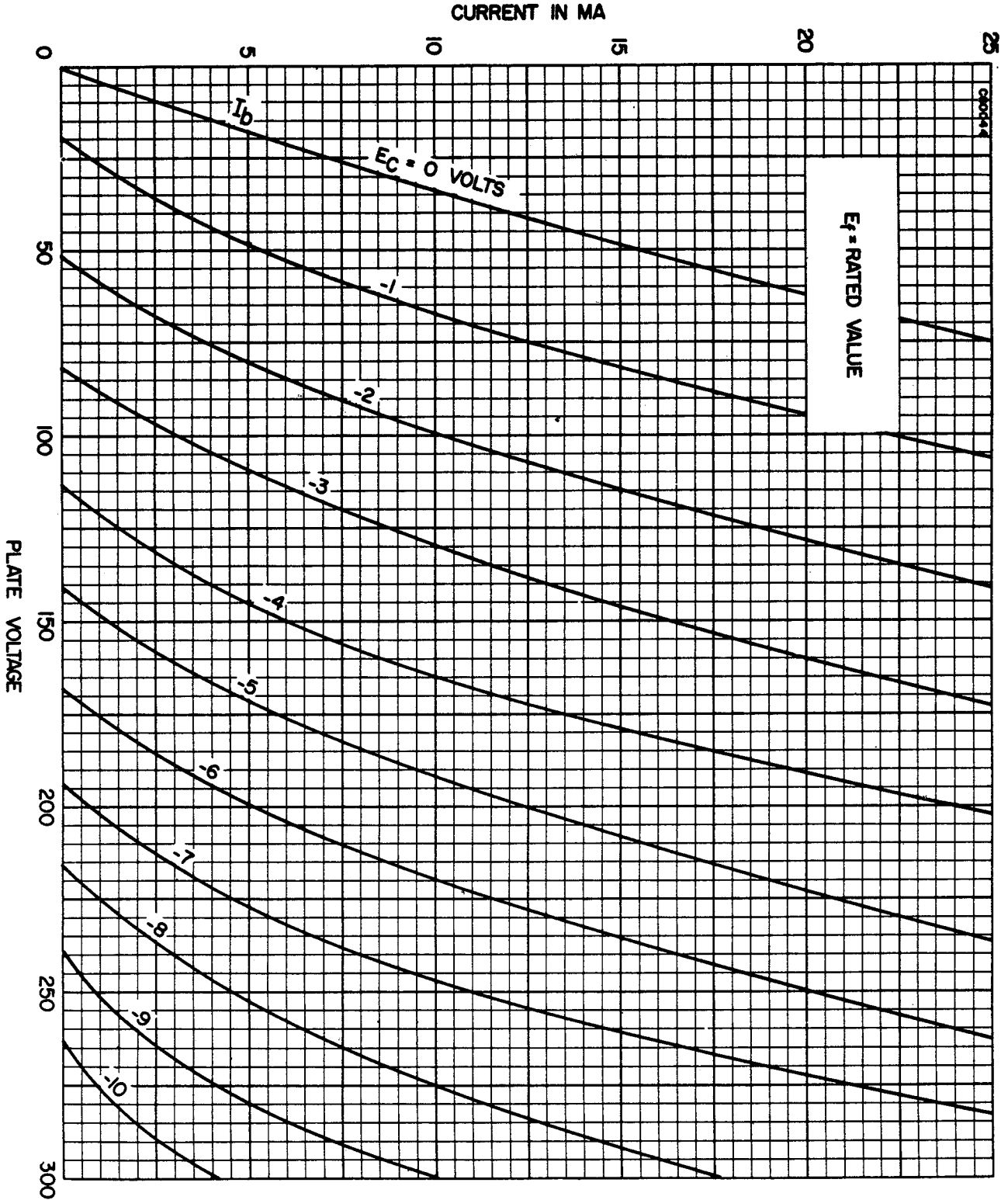


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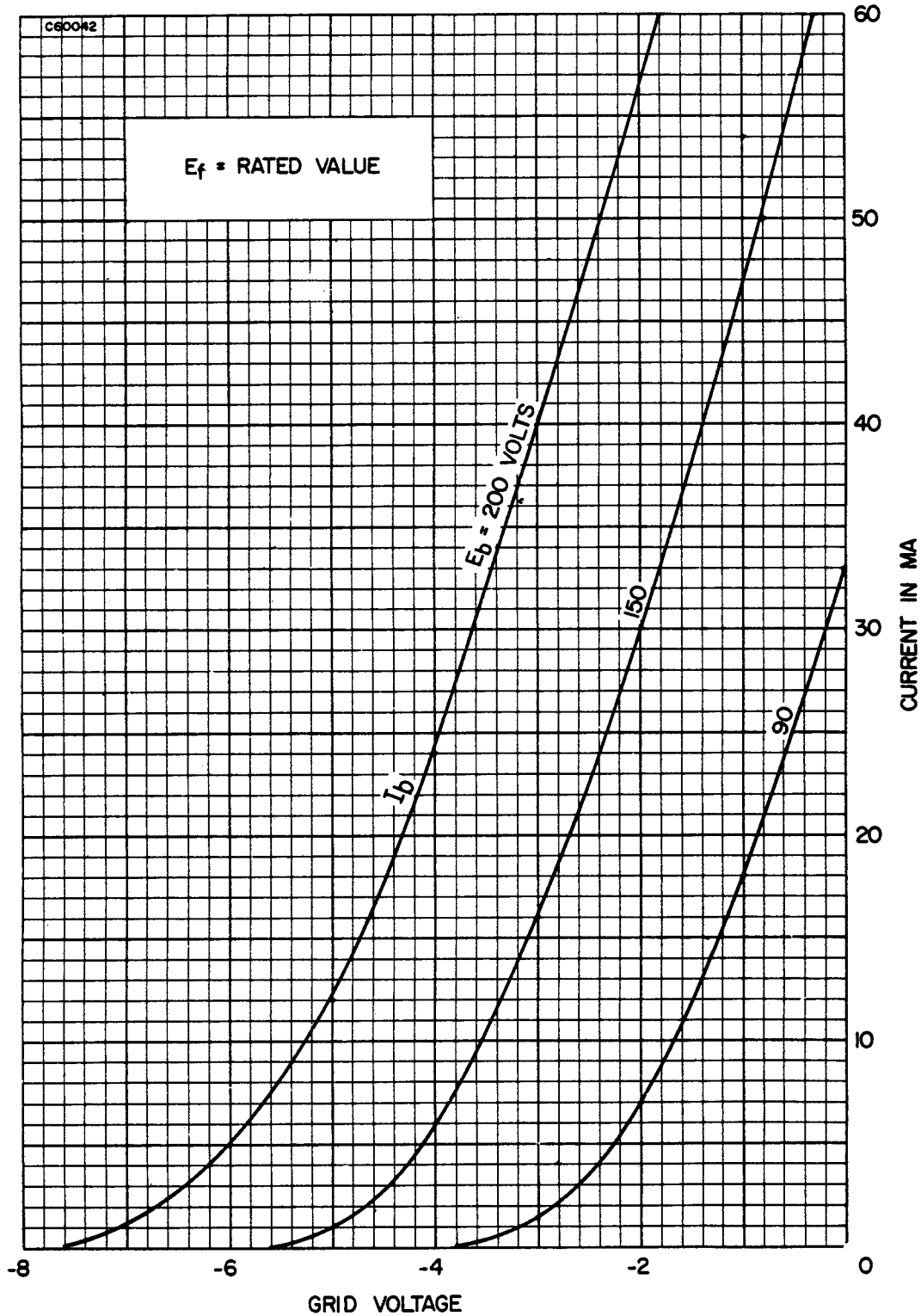
AVERAGE PLATE CHARACTERISTICS



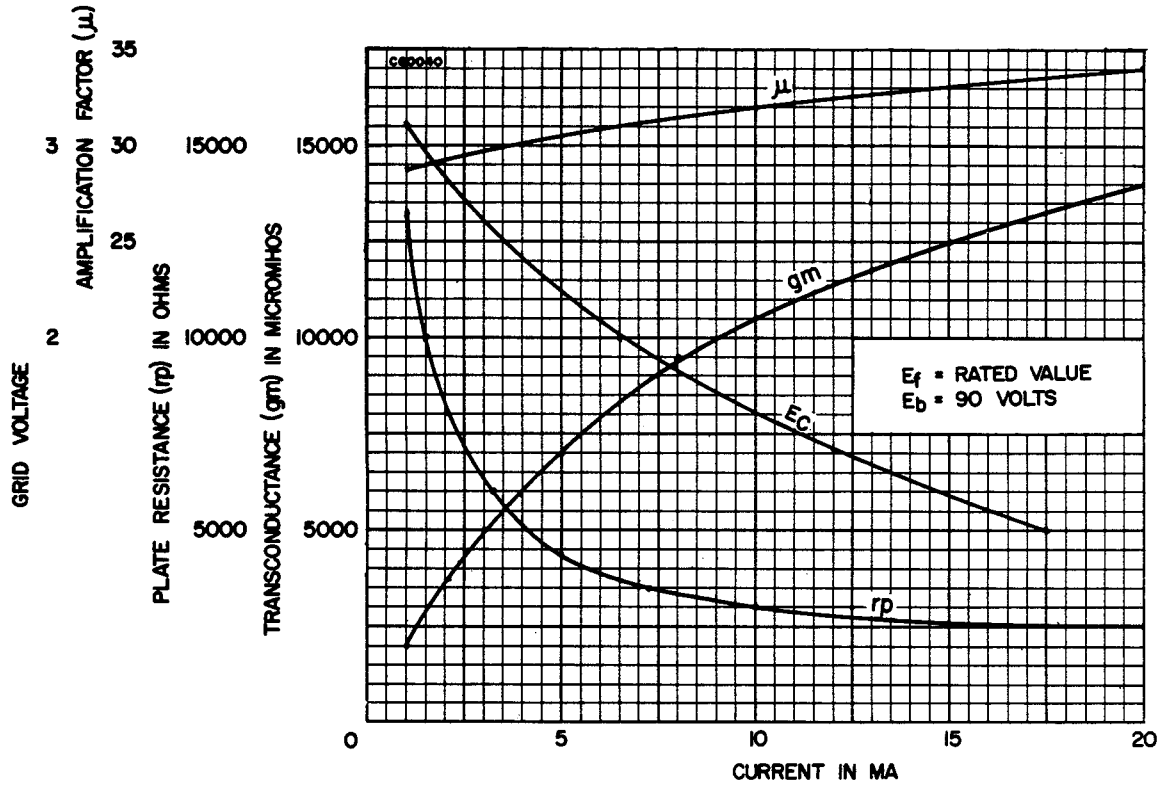
**AVERAGE PLATE CHARACTERISTICS**



**AVERAGE TRANSFER CHARACTERISTICS**



AVERAGE TRANSFER CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS

