

**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.

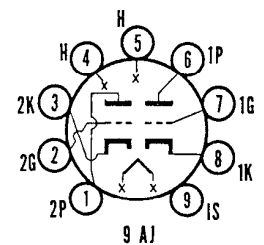
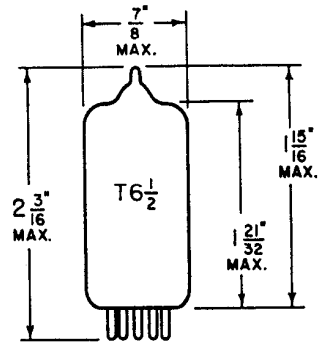
**CHARACTERISTICS**

**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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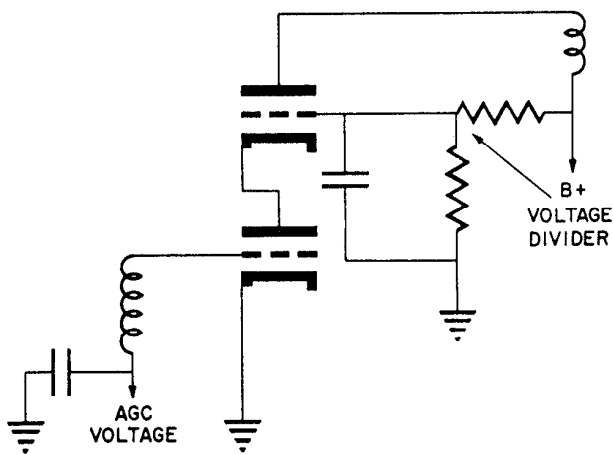
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NOTES:

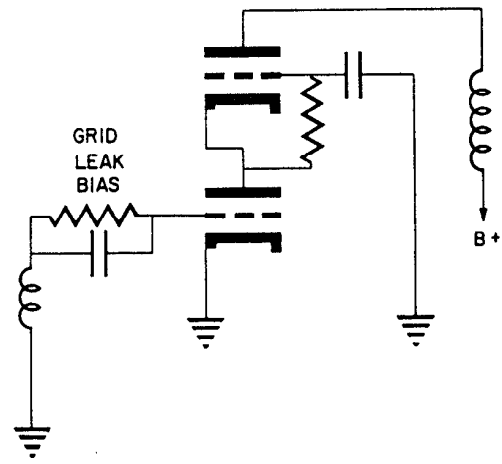
1. Grounded-cathode section (Section No. 1) connects to Pins 6, 7, and 8. Grounded-grid section (Section No. 2) connects to Pins 1, 2, and 3.
2. In order not to exceed the maximum permissible plate voltage when the cascode amplifier has AGC voltage applied to it, a voltage divider is recommended for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

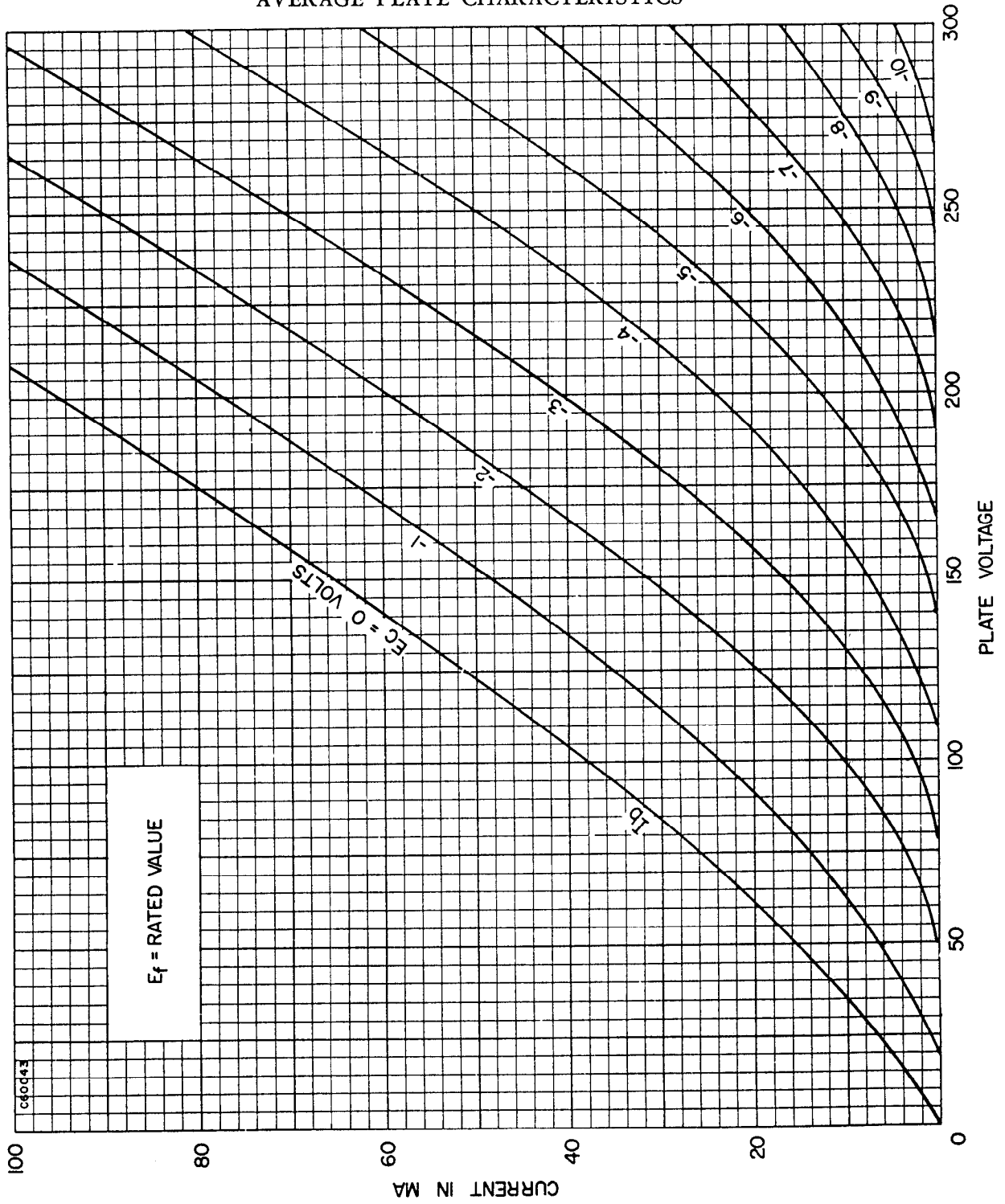


CIRCUIT B

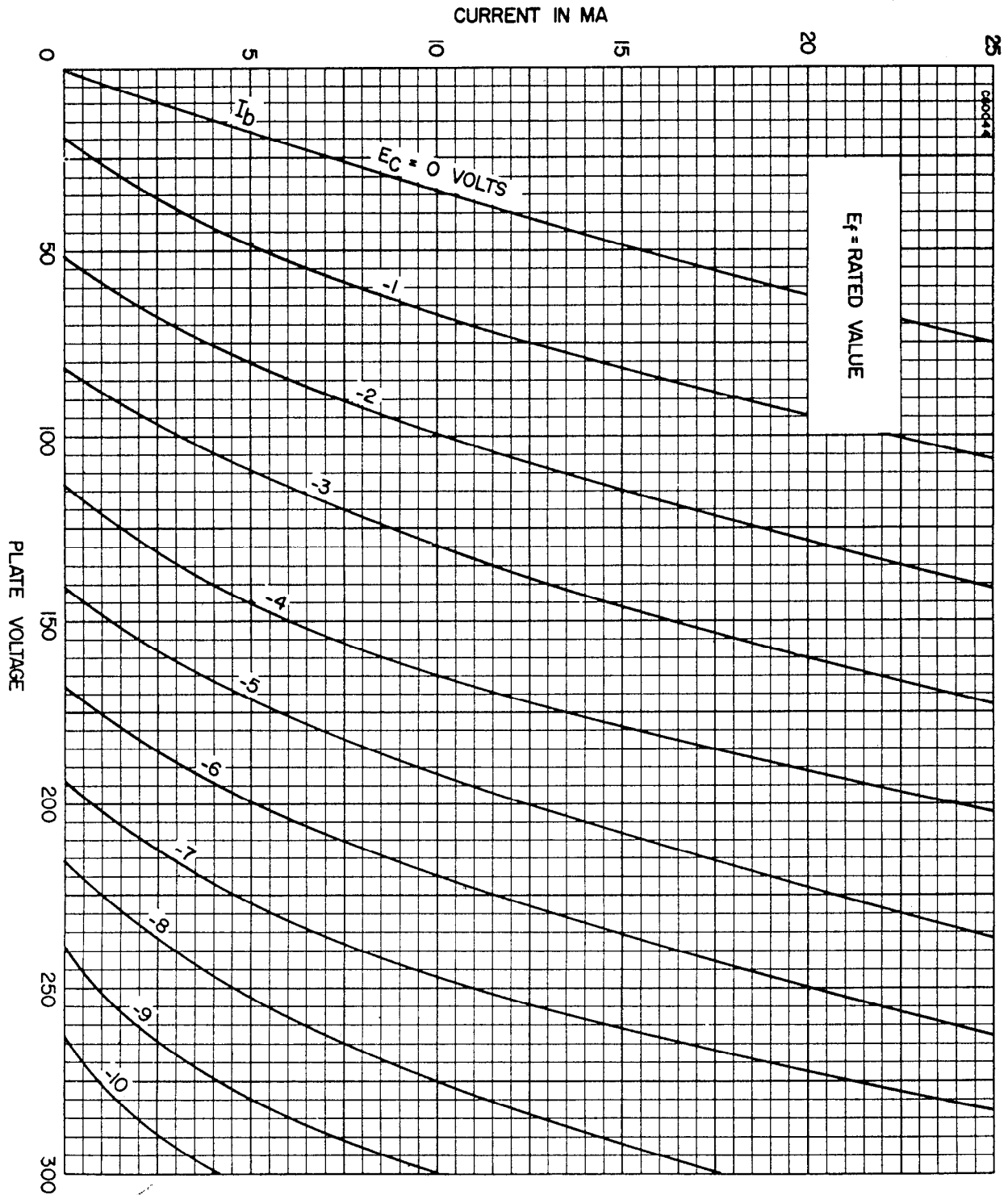


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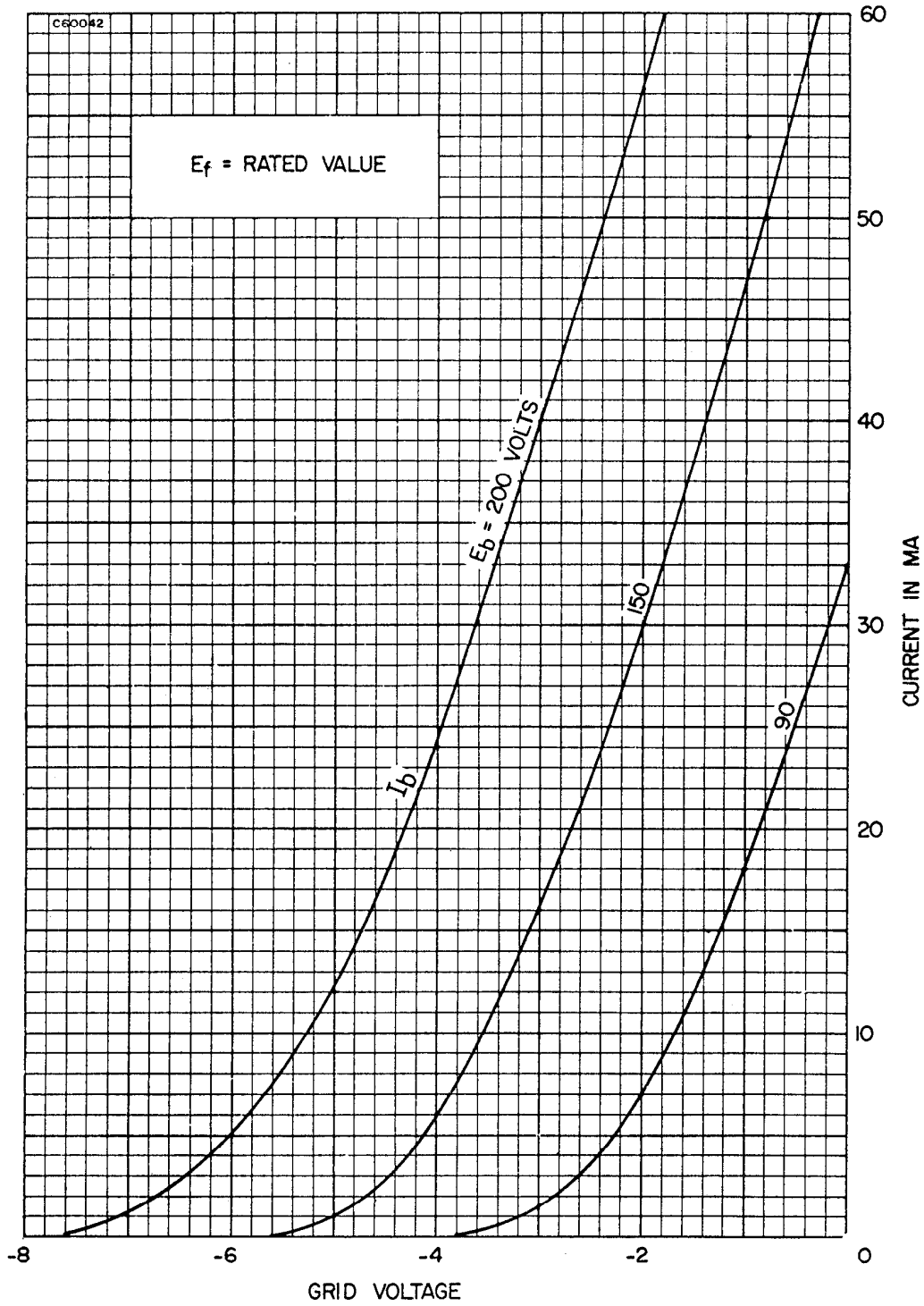
AVERAGE PLATE CHARACTERISTICS



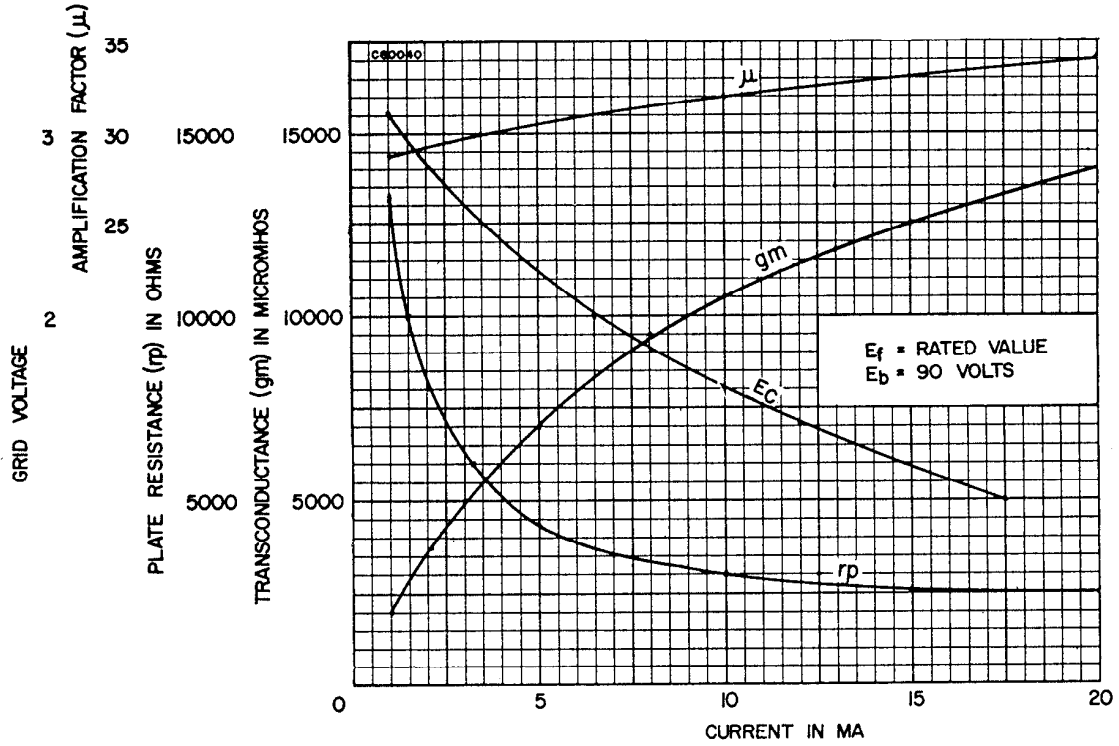
AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS

