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engineering data service

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MECHANICAL DATA

Bulb	T-9
Base	Lock-in 8-Pin
Basing	8V
Cathode	Coated Unipotential
Mounting Position	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage (Nominal)	7.0 Volts
Heater Voltage	6.3 Volts
Heater Current	800 Ma

DIRECT INTERELECTRODE CAPACITANCES (Shielded)[1]

Control Grid to Plate	0.7 $\mu\mu f$
Input	12.0 $\mu\mu f$
Output	9.5 $\mu\mu f$
Suppressor Grid to Plate	4.0 $\mu\mu f$

RATINGS (Design Center Values)

Plate Voltage	200 Volts	Max.
Screen Grid Voltage	100 Volts	Max.
Plate Dissipation	8.5 Watts	Max.
Screen Grid Dissipation	2.5 Watts	Max.
Positive DC Control Grid Voltage	50 Volts	Max.
Positive DC Suppressor Grid Voltage	100 Volts	Max.
Negative DC Control Grid Voltage	-100 Volts	Max.
Negative DC Suppressor Grid Voltage	-100 Volts	Max.
Heater-Cathode Voltage	±200 Volts	Max.
Grid Circuit Resistance		
Fixed Bias	100,000 Ohms	Max.

CHARACTERISTICS AND TYPICAL OPERATION

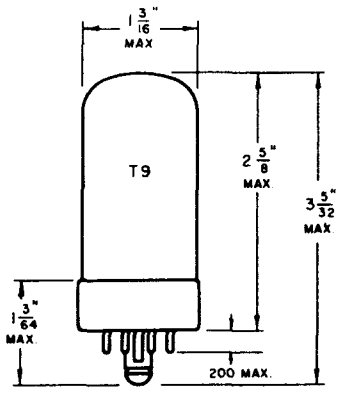
Plate Voltage	150	150	150	Volts
Screen Grid Voltage	90	90	90	Volts
Control Grid Voltage	0	-11	0	Volts
Suppressor Grid Voltage	0	0	-9.5	Volts
Transconductance	6,000			μmhos
Plate Resistance (approx.)	11,500			Ohms
Plate Current	40	2.5[3]	2.0[3]	Ma
Screen Grid Current[2]	21	0.45	60[3]	Ma
Control Grid Voltage				
For $I_b = 10\ \mu a$	-17.5			Volts

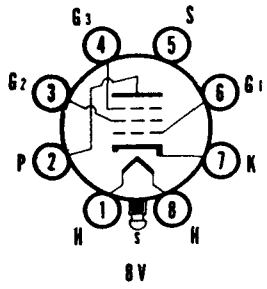
NOTES:

1. *With 1-5/16" diameter shield, RTMA No. 308 connected to cathode.*
2. *For use as a "gating" tube, the dissipation rating of the screen may approximate 4.0 watts momentarily, providing the dissipation averaged over any one-second interval does not exceed the rating.*
3. *Maximum values.*

QUICK REFERENCE DATA

Lock-in, sharp cutoff pentode with suppressor control, designed for service in electronic computers.





SYLVANIA ELECTRIC PRODUCTS INC.

Prepared and Released By The TECHNICAL PUBLICATIONS SECTION EMPORIUM, PENNSYLVANIA

JULY 1953

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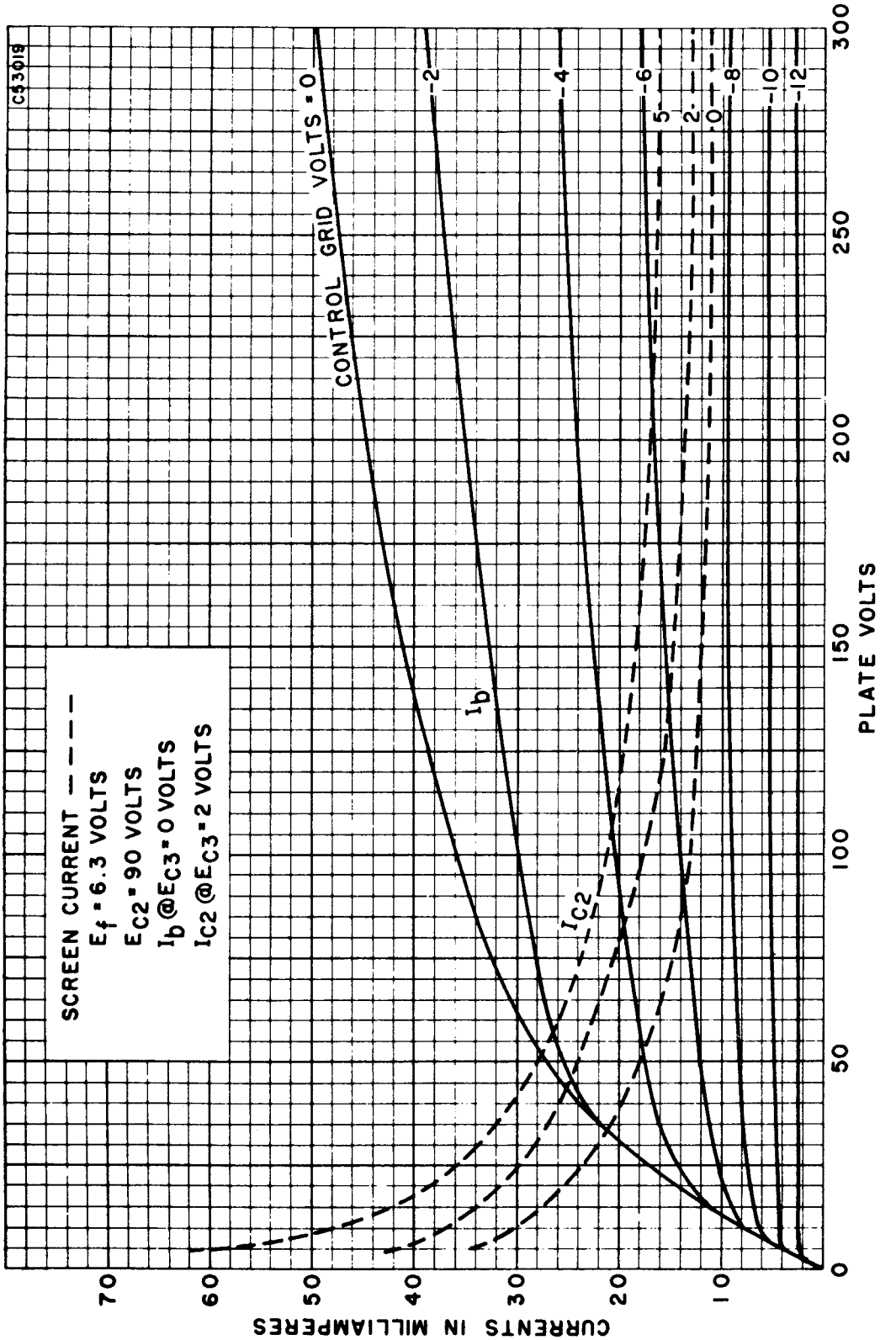
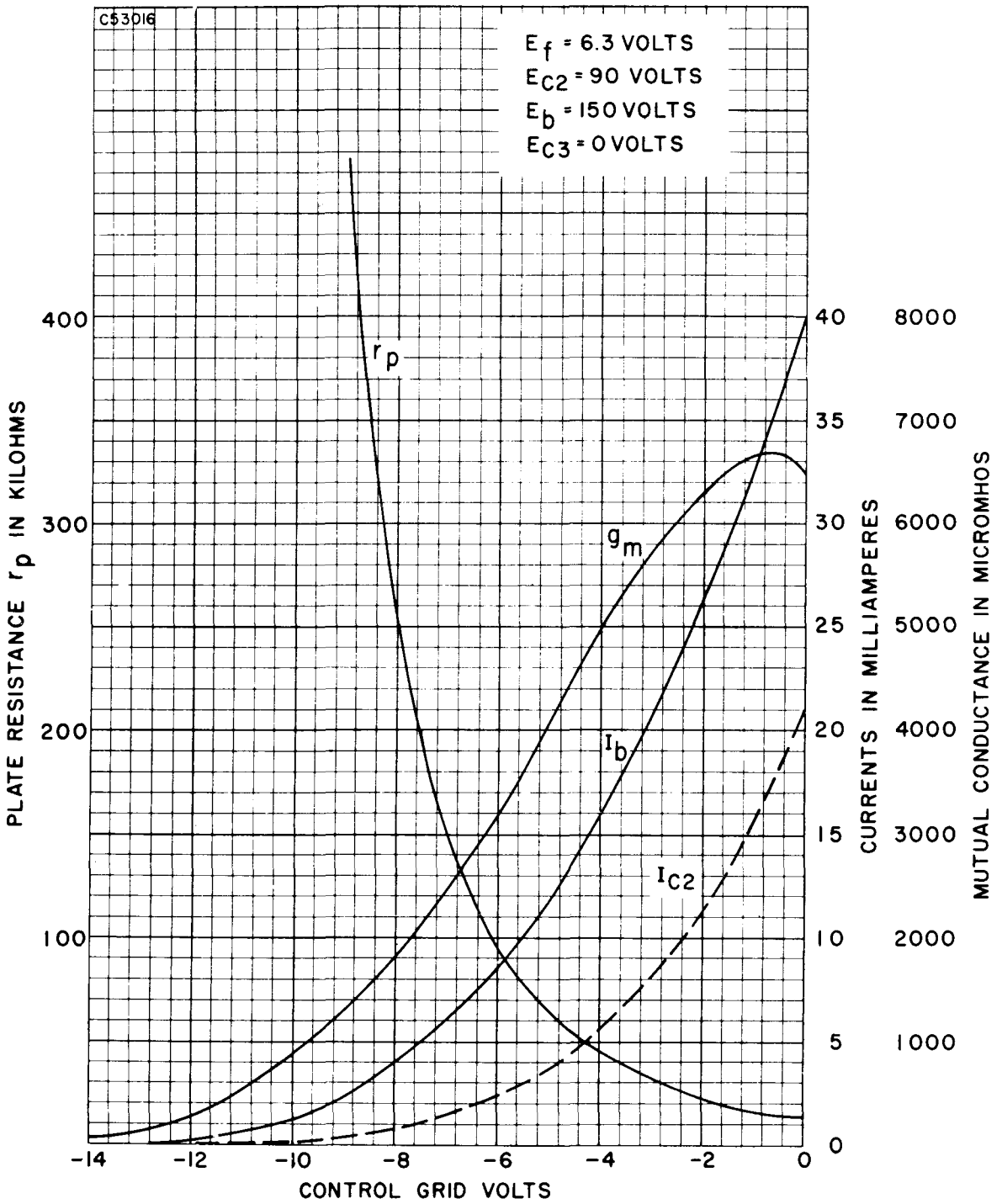
AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



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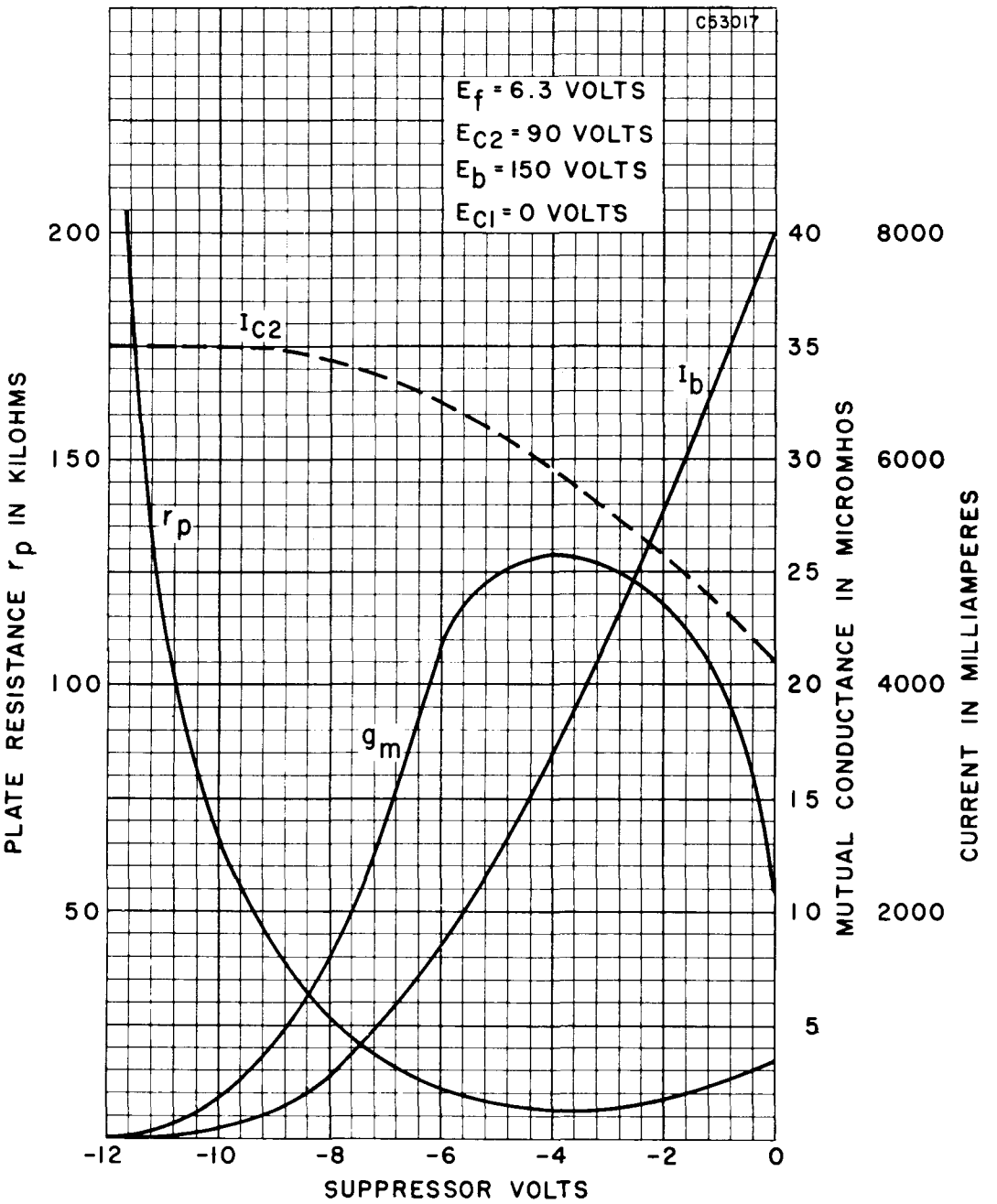
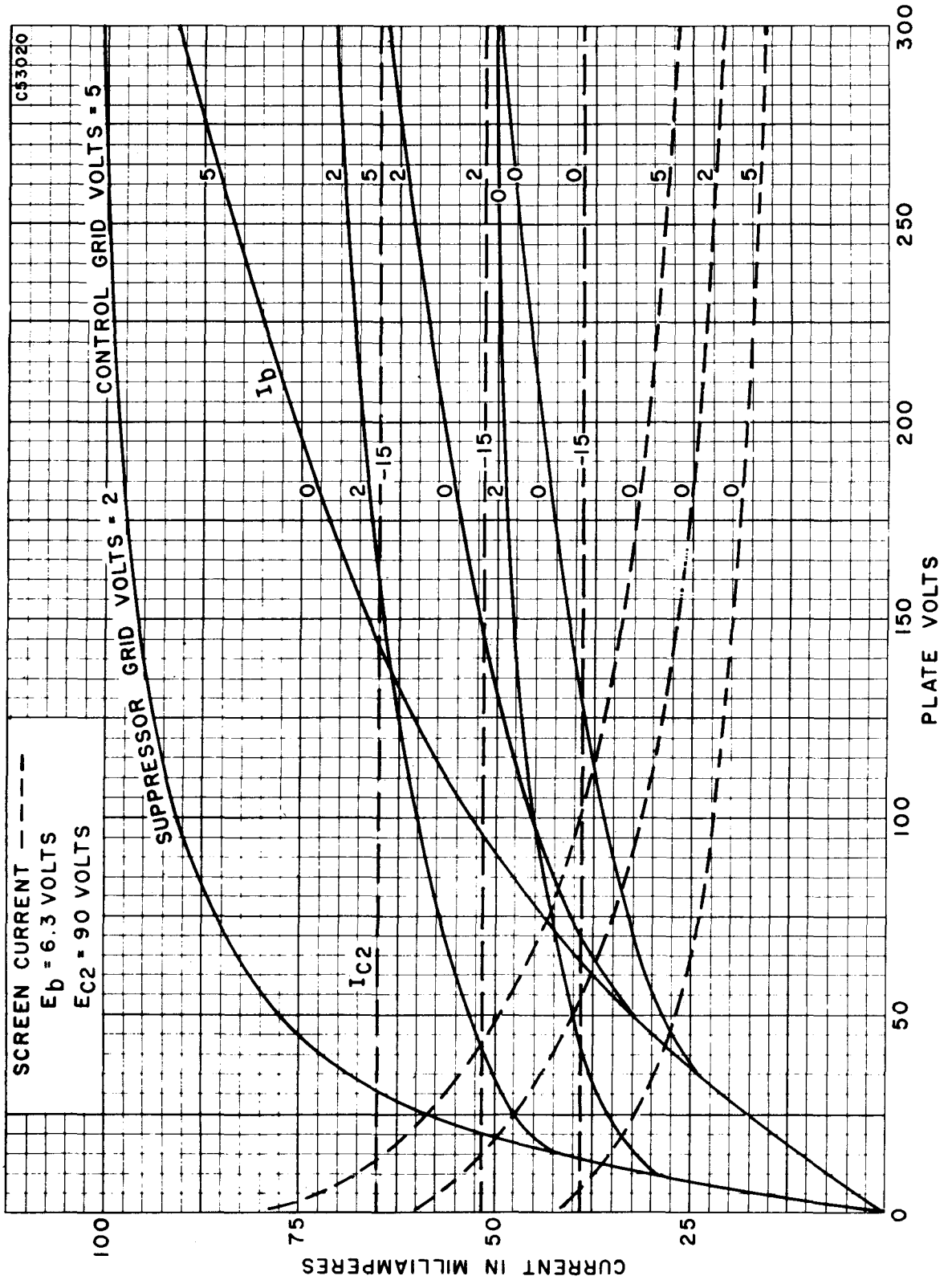
AVERAGE TRANSFER CHARACTERISTICS

PLOTED VS SUPPRESSOR GRID VOLTAGE



AVERAGE PLATE CHARACTERISTICS



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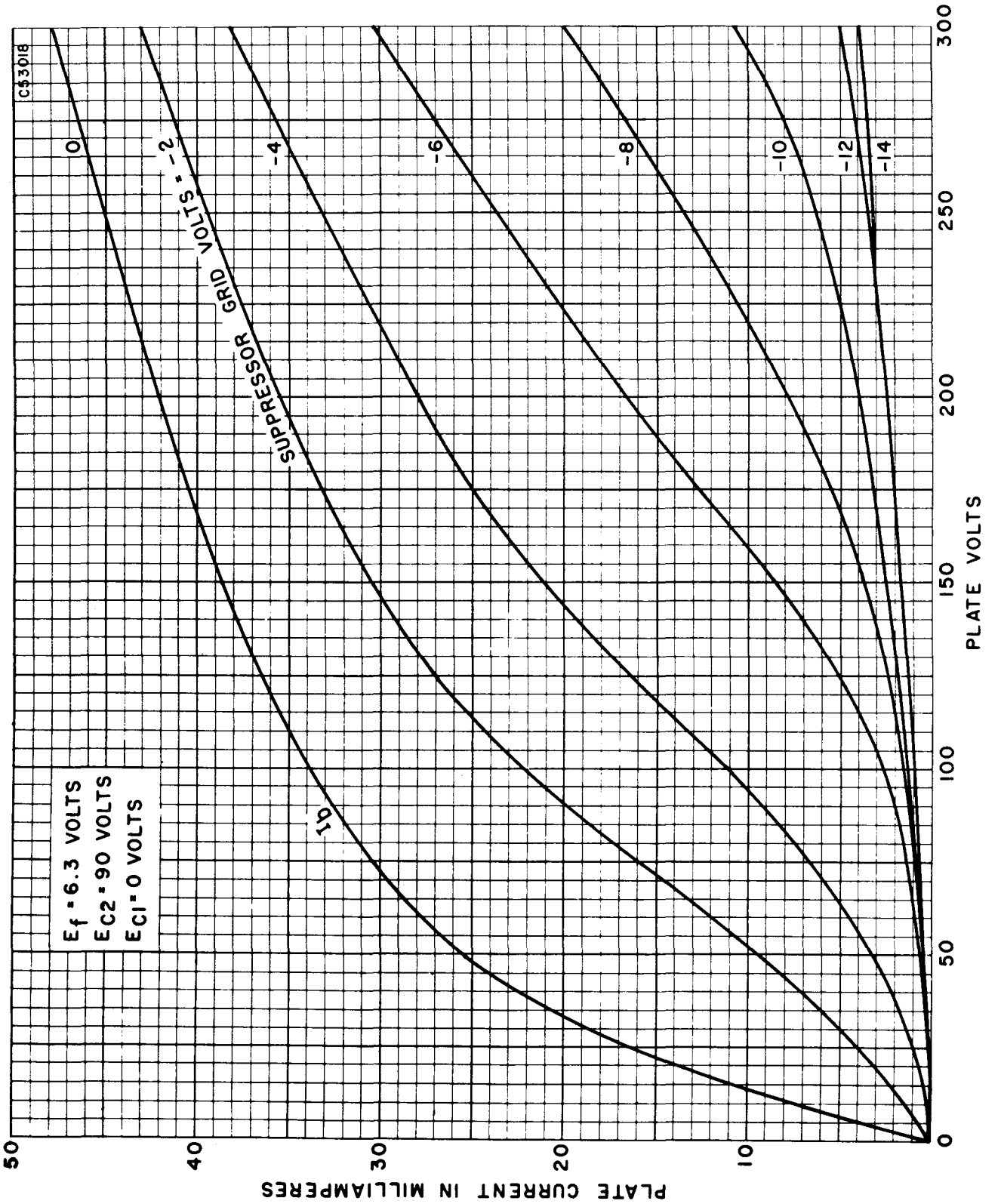
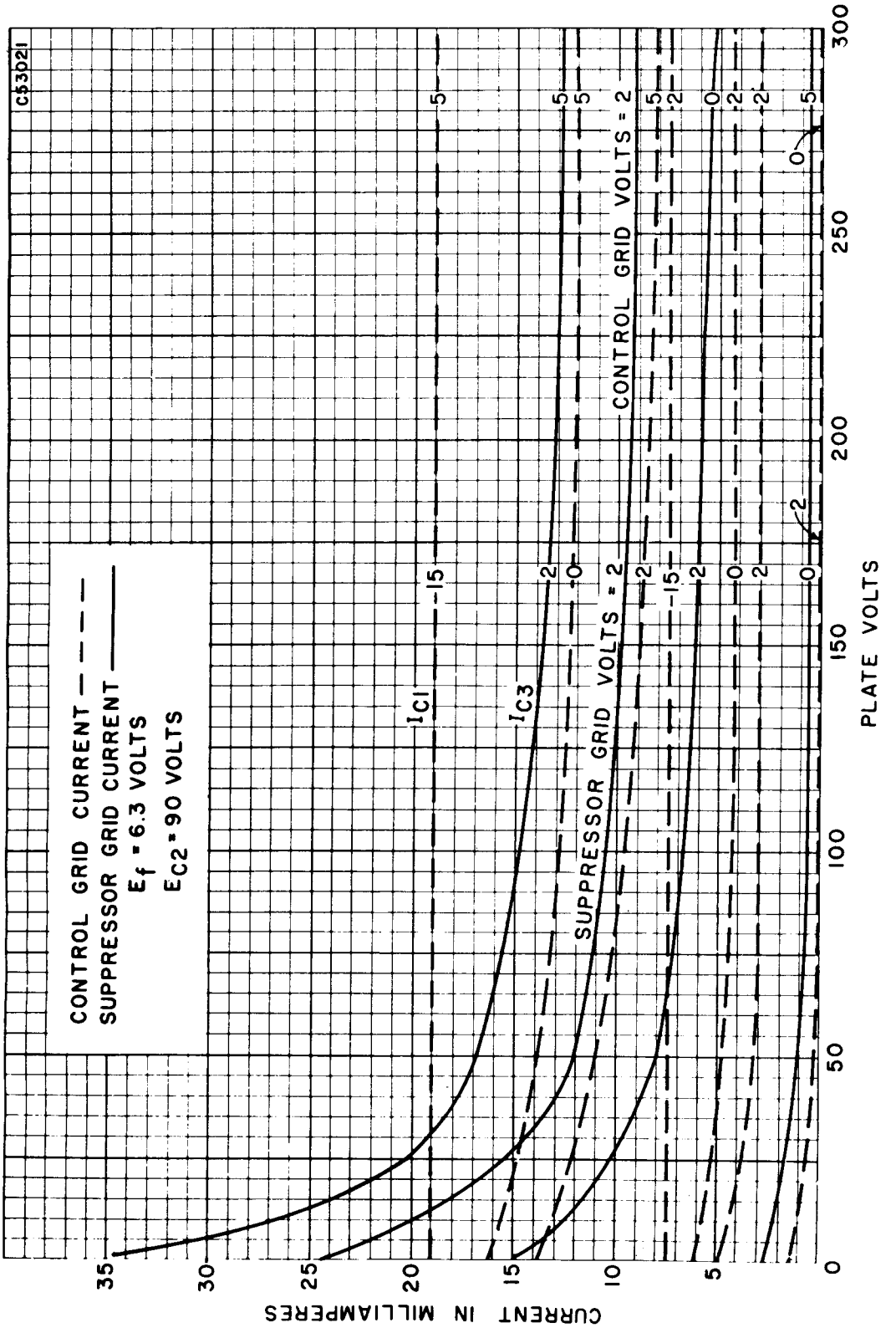
AVERAGE PLATE CHARACTERISTICS



AVERAGE CHARACTERISTICS