

MECHANICAL DATA

Bulb	ST16
Base	B7-12, Medium Shell Octal, 7-Pin
Outline	16-3
Basing	7S
Cathode	Coated Unipotential
Mounting Position	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage	6.3 Volts
Heater Current	900 Ma

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Grid to Plate: (g ¹ to p)	0.9 μmf
Input: g ¹ to (h+k+g ² +bp)	11.5 μmf
Output: p to (h+k+g ² +bp)	9.5 μmf

RATINGS (Design Center Values)

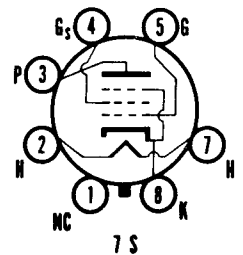
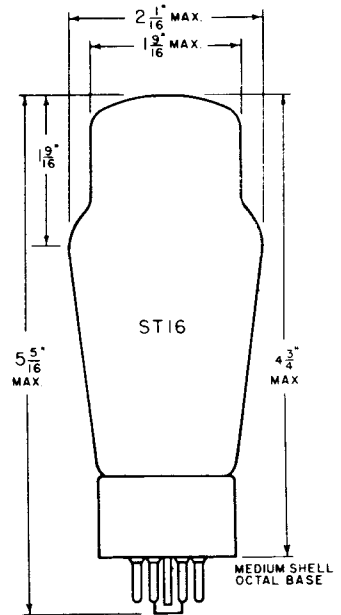
	Triode Connection	Pentode Connection
Plate Voltage	275	360 Volts Max.
Grid No. 2 Voltage		270 Volts Max.
Plate Dissipation	19	19.0 Watts Max.
Grid No. 2 Dissipation		2.5 Watts Max.
Heater-Cathode Voltage	180	180 Volts Max.
Grid No. 1 Circuit Resistance		
Fixed Bias	0.1	0.1 Megohms Max.
Cathode Bias	0.5	0.5 Megohms Max.

CHARACTERISTICS AND TYPICAL OPERATION

	Triode Connection	Pentode Connection	
Class A₁ Amplifier (Single Tube)			
Plate Voltage	250	300	350 Volts
Grid No. 2 Voltage	250	200	250 Volts
Grid No. 1 Voltage ¹	-20	-14	-18 Volts
Peak A F Signal Voltage	20	14	18 Volts
Plate Current (Zero Signal)	40	72	54 Ma
Plate Current (Max. Signal)	44	79	66 Ma
Grid No. 2 Current (Zero Signal)		5.0	2.5
Grid No. 2 Current (Max. Signal)		7.3	4.7
Transconductance	4700	6000	5300 μmhos
Plate Resistance	1700	22500	35000 Ohms
Load Resistance	5000	2500	4200 Ohms
Power Output	1.4	6.5	10.8 Watts
Total Harmonic Distortion	5	10	11
			15 Percent

QUICK REFERENCE DATA

The Sylvania Type 6L6G is a beam power audio amplifier designed for service in the output stage of radio receivers or other equipment requiring high power output, power sensitivity and efficiency. Electrically, the 6L6G and 6L6 are identical.



**SYLVANIA ELECTRIC
PRODUCTS INC.
RADIO TUBE DIVISION**

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SYLVANIA

6L6G

TYPICAL OPERATION CONT'D

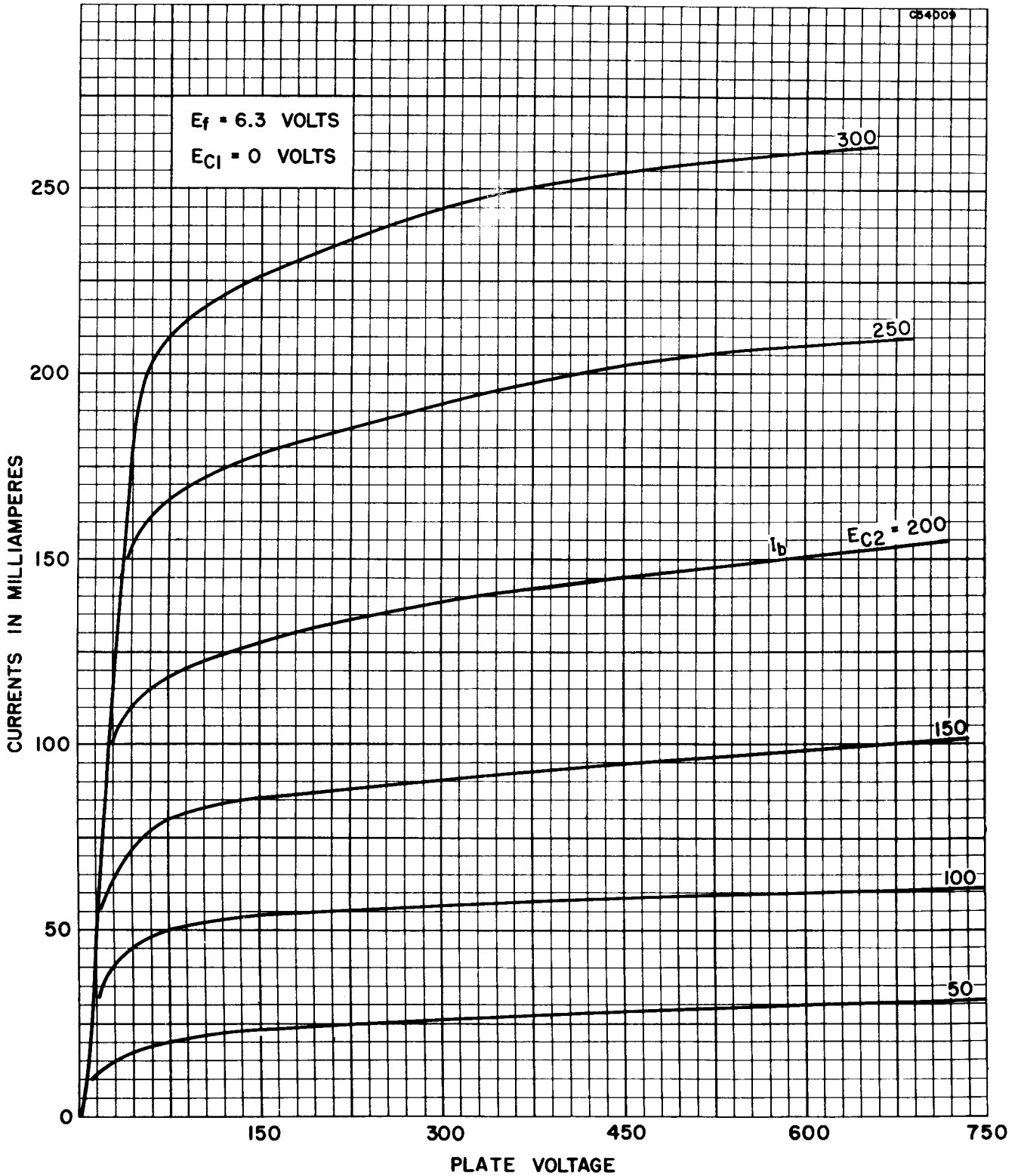
Push-Pull Amplifier

	Class A ₁		Class AB ₁		Class AB ₂		
Plate Voltage	250	270	360	360	360	360	Volts
Grid No. 2 Voltage	250	270	270	270	225	270	Volts
Grid No. 1 Voltage ¹	-16	-17.5	-22.5	-22.5	-18	-22.5	Volts
Peak A F Grid to Grid Voltage	32	35	45	45	52	72	Volts
Plate Current (Zero Signal)	120	134	88	88	78	88	Ma
Plate Current (Max. Signal)	140	155	132	140	142	205	Ma
Grid No. 2 Current (Zero Signal)	10	11	5	5	3.5	5	Ma
Grid No. 2 Current (Max. Signal)	16	17	15	11	11	16	Ma
Transconductance (Each Tube)	5500	5700					μmhos
Plate Resistance (Each Tube)	24500	23500					Ohms
Load Resistance	5000	5000	6600	3800	6000	3800	Ohms
Power Output	14.5	17.5	26.5	18	31	47	Watts
Total Harmonic Distortion	2	2	2	2	2	2	Percent

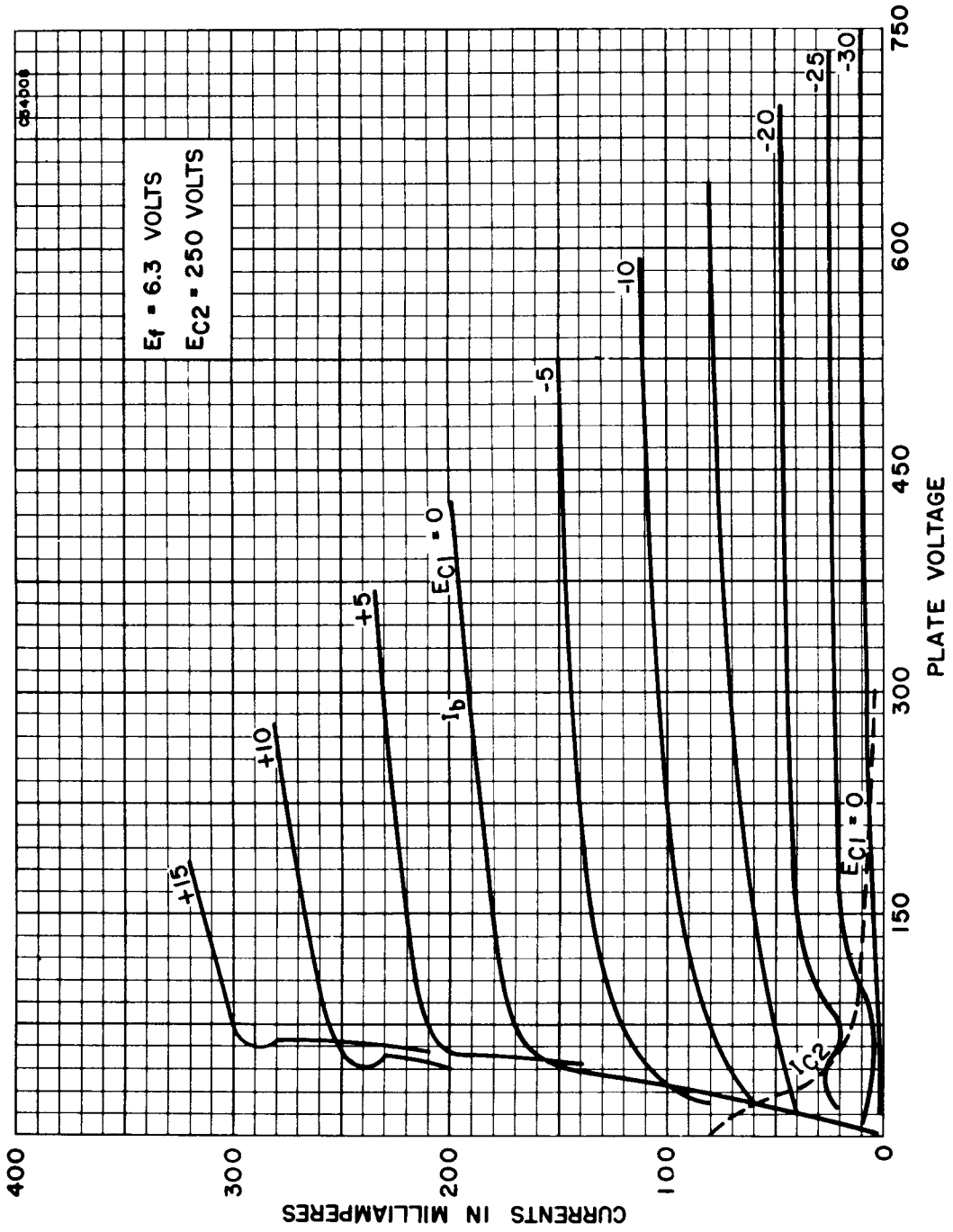
NOTE:

1. For fixed bias operation the grid bias resistor should not exceed 0.1 megohm. A grid circuit resistance of .25 megohm may be used for self bias providing the heater voltage will not exceed 7.0 volts under any probable operating condition.

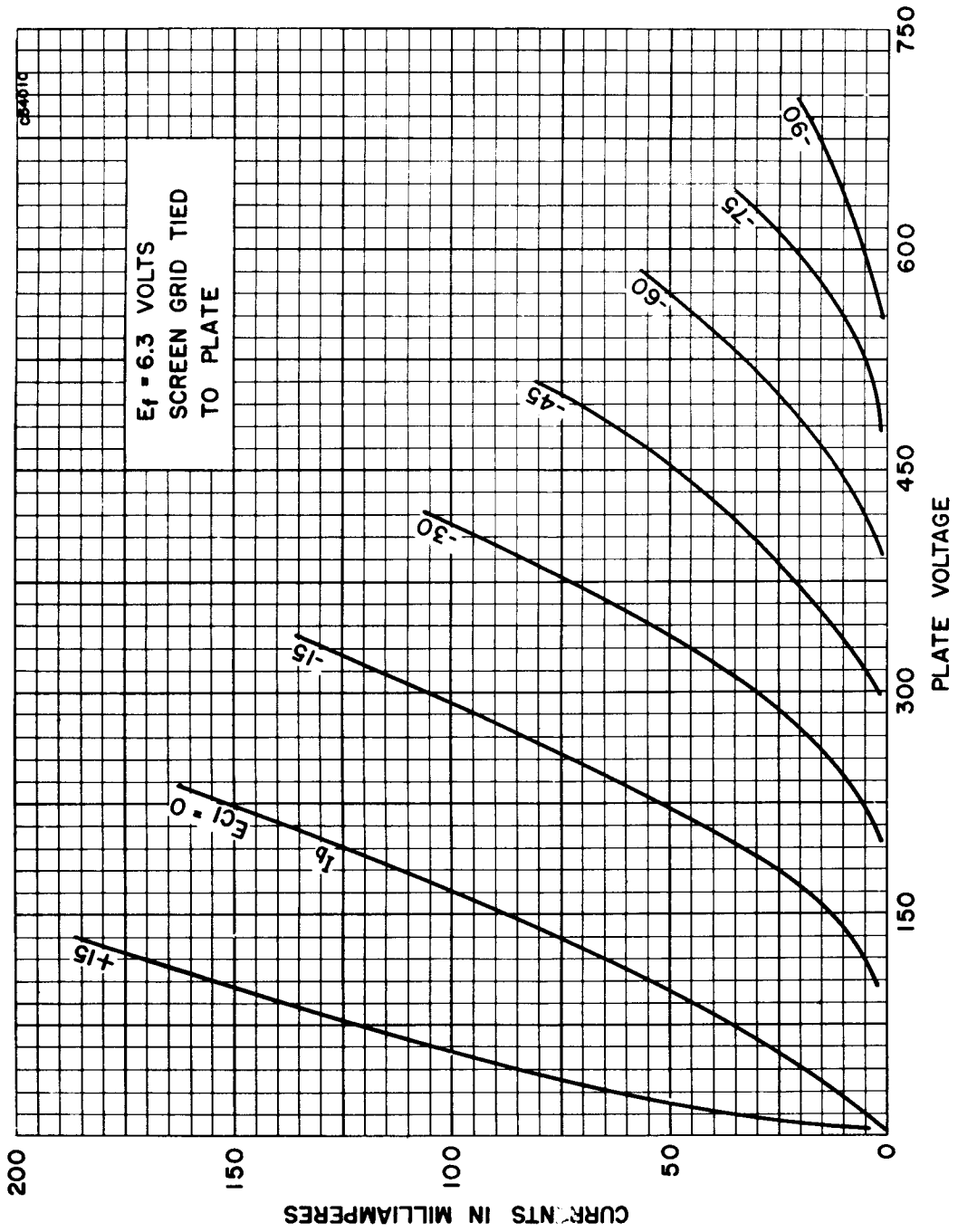
AVERAGE PLATE CHARACTERISTICS



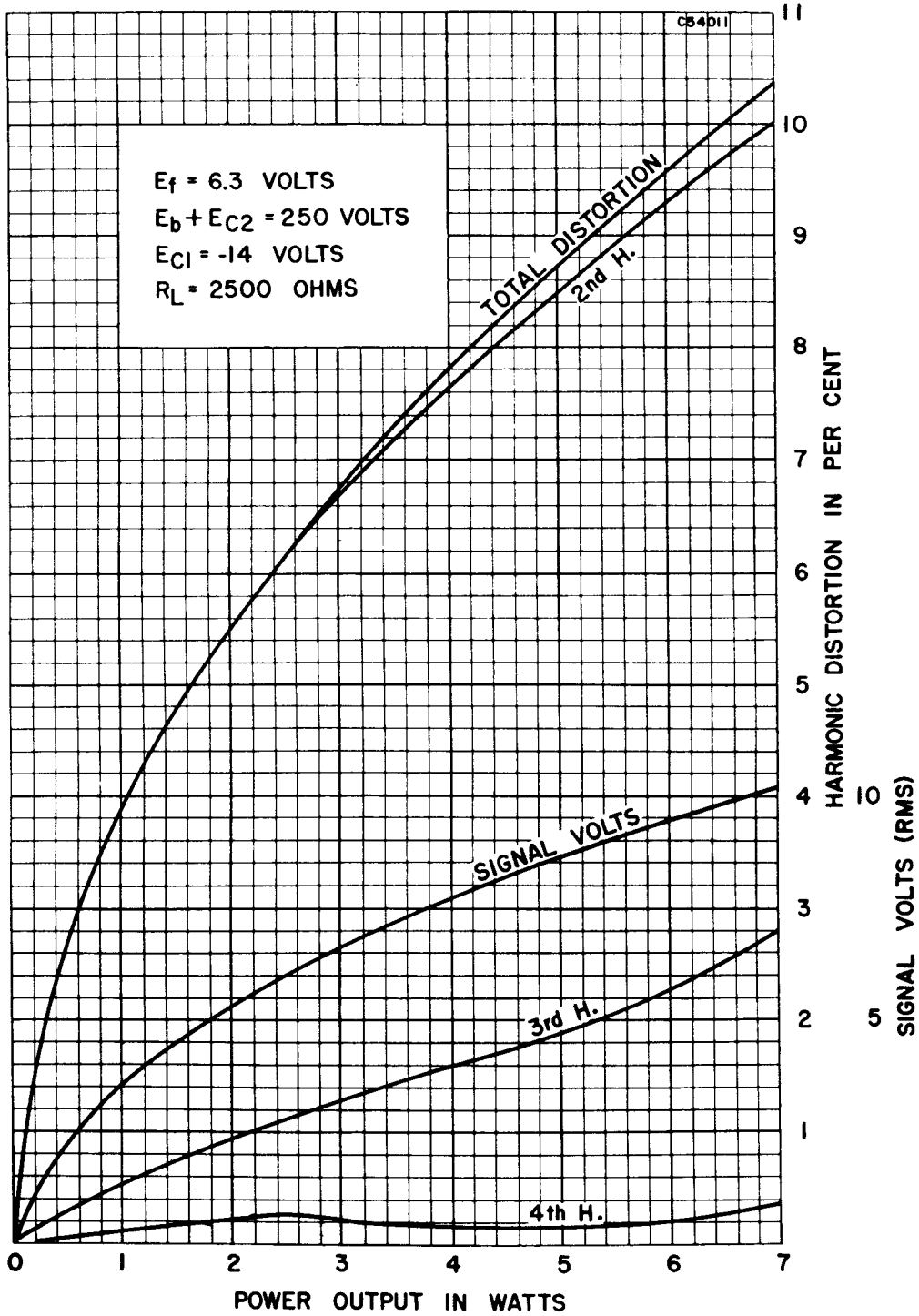
AVERAGE PLATE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS
TRIODE CONNECTED



AVERAGE OPERATION CHARACTERISTICS



AVERAGE OPERATION CHARACTERISTICS

