

**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 <sup>1</sup> to p) . . . . .	0.9 μmf
Input: g <sup>1</sup> to (h+k+g <sup>2</sup> +bp) . . . . .	11.5 μmf
Output: p to (h+k+g <sup>2</sup> +bp) . . . . .	9.5 μmf

**RATINGS (Design Center Values)**

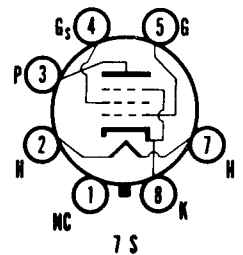
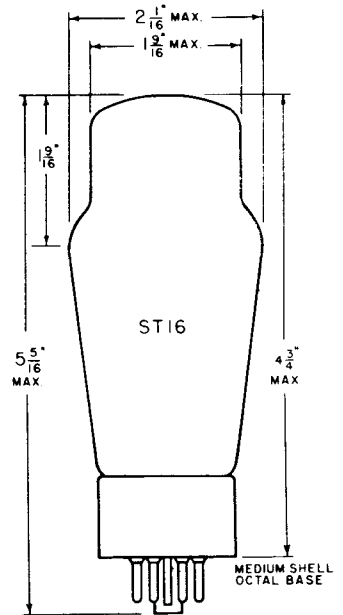
	<b>Triode Connection</b>	<b>Pentode Connection</b>
Plate Voltage . . . . .	275	360 Volts Max.
Grid No. 2 Voltage . . . . .		270 Volts Max.
Plate Dissipation . . . . .	19	19.0 Watts Max.
Grid No. 2 Dissipation . . . . .		2.5 Watts Max.
Heater-Cathode Voltage . . . . .	180	180 Volts Max.
Grid No. 1 Circuit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

**CHARACTERISTICS AND TYPICAL OPERATION**

	<b>Triode Connection</b>	<b>Pentode Connection</b>	
<b>Class A<sub>1</sub> Amplifier (Single Tube)</b>			
Plate Voltage . . . . .	250	300	350 Volts
Grid No. 2 Voltage . . . . .	250	200	250 Volts
Grid No. 1 Voltage <sup>1</sup> . . . . .	-20	-14	-12.5
Peak A F Signal Voltage . . . . .	20	14	12.5
Plate Current (Zero Signal) . . . . .	40	72	48
Plate Current (Max. Signal) . . . . .	44	79	55
Grid No. 2 Current (Zero Signal) . . . . .		5.0	2.5
Grid No. 2 Current (Max. Signal) . . . . .		7.3	4.7
Transconductance . . . . .	4700	6000	5300
Plate Resistance . . . . .	1700	22500	35000
Load Resistance . . . . .	5000	2500	4500
Power Output . . . . .	1.4	6.5	6.5
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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MARCH 1954

SYLVANIA

6L6G

TYPICAL OPERATION CONT'D

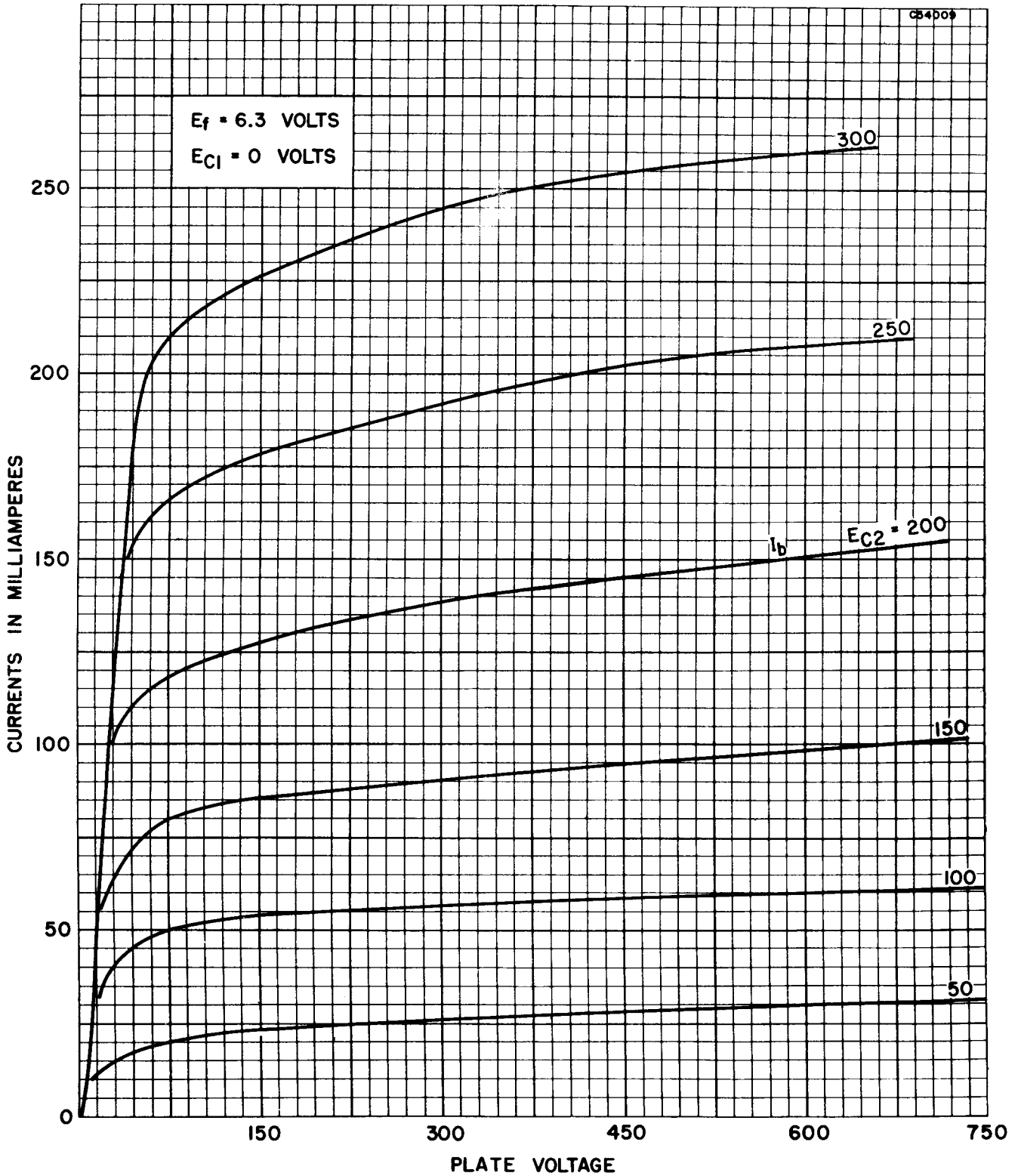
Push-Pull Amplifier

	Class A <sub>1</sub>		Class AB <sub>1</sub>		Class AB <sub>2</sub>		
Plate Voltage . . . . .	250	270	360	360	360	360	Volts
Grid No. 2 Voltage . . .	250	270	270	270	225	270	Volts
Grid No. 1 Voltage <sup>1</sup> . .	-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

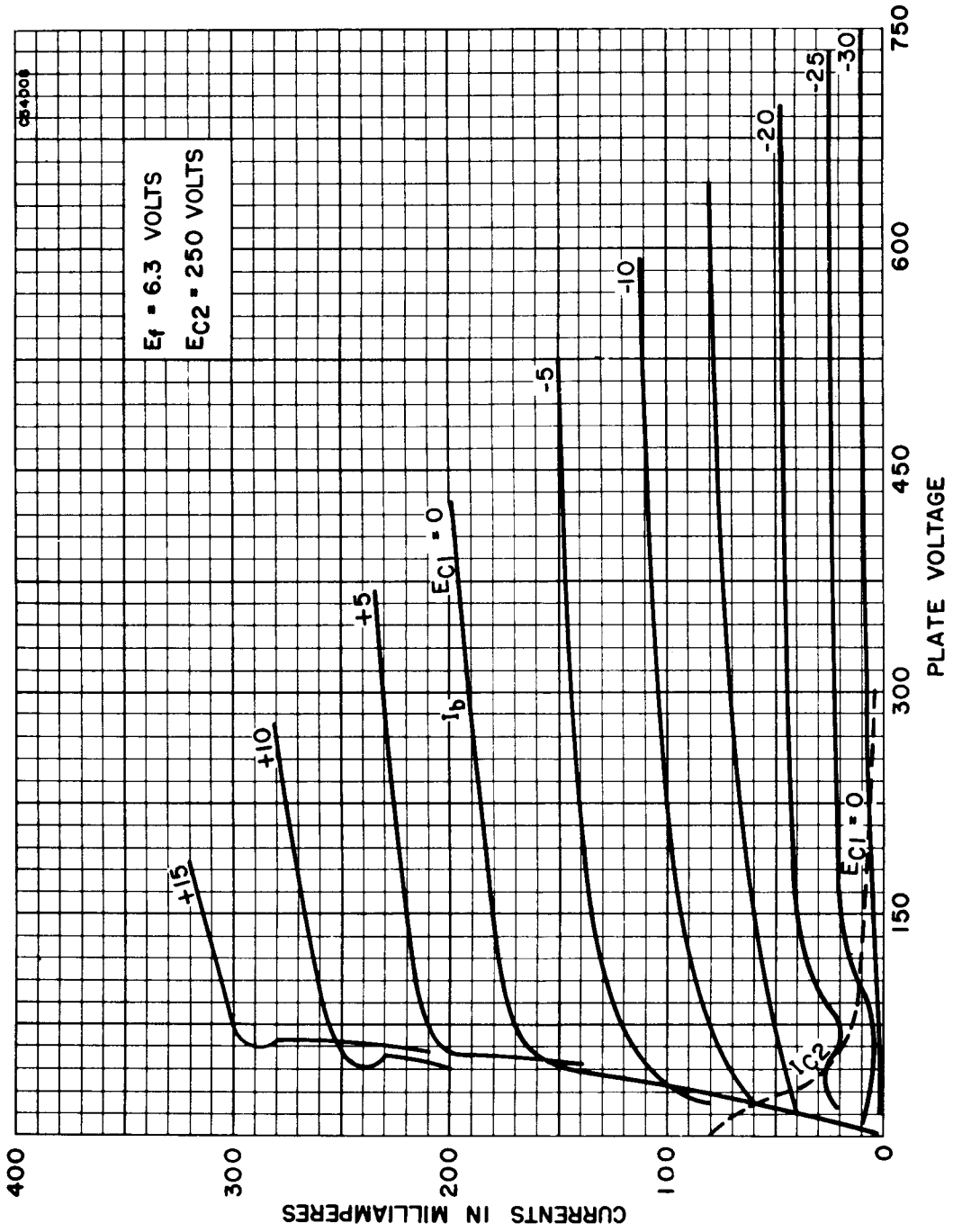
NOTE:

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.

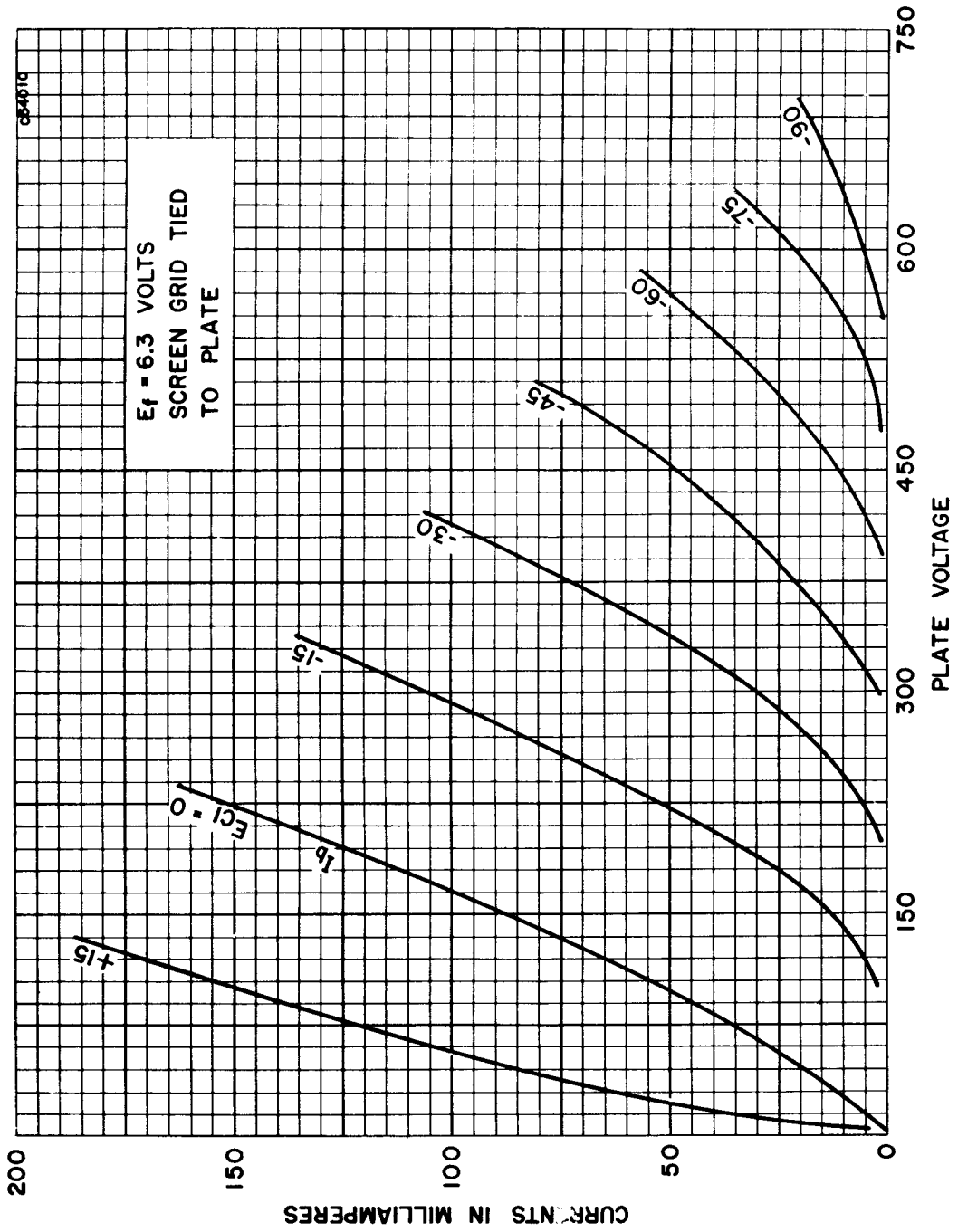
AVERAGE PLATE CHARACTERISTICS



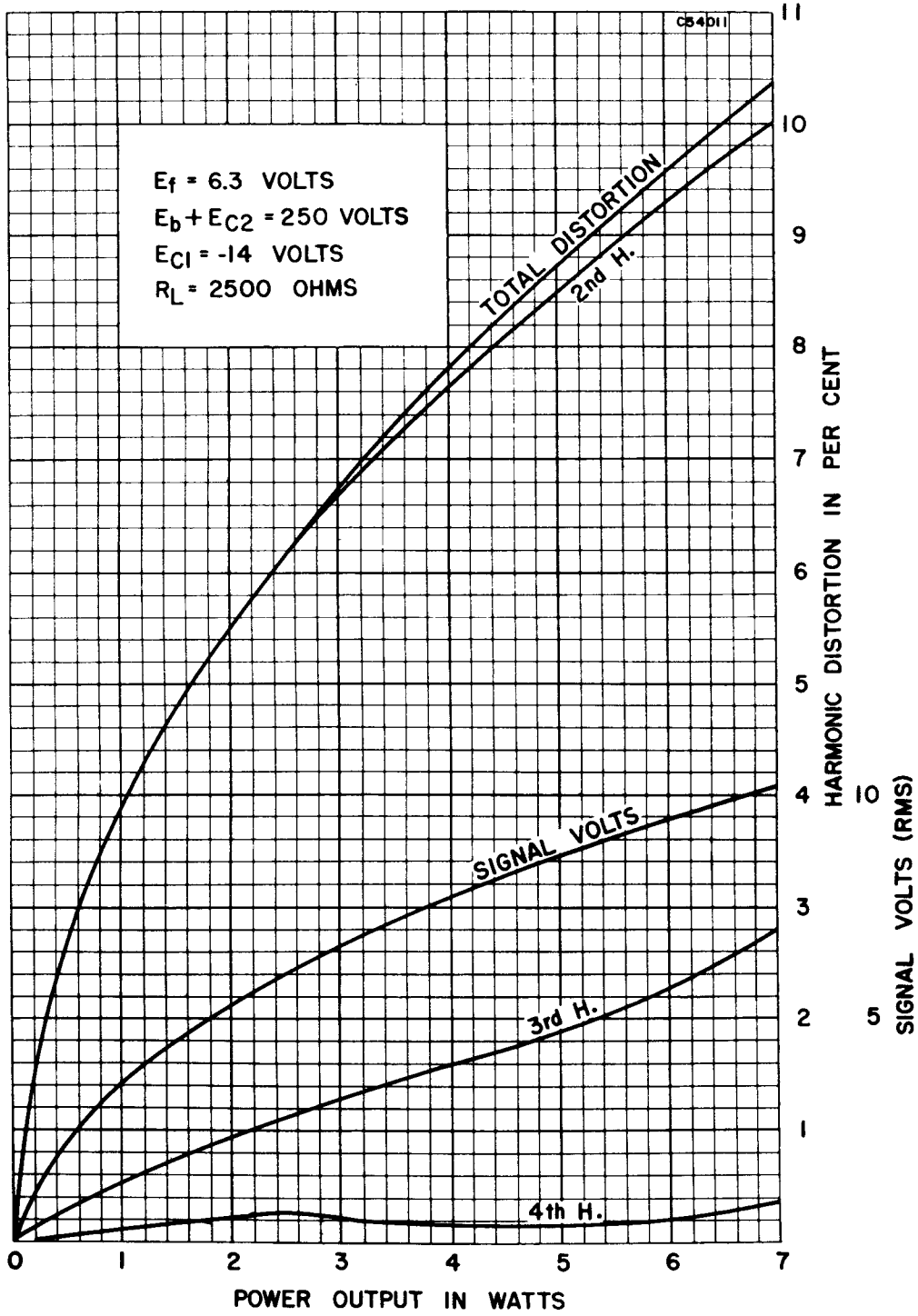
AVERAGE PLATE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS  
TRIODE CONNECTED



AVERAGE OPERATION CHARACTERISTICS



**AVERAGE OPERATION CHARACTERISTICS**

