

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 μf
Input: g^1 to ($h+k+g^2+bp$)	11.5 μf
Output: p to ($h+k+g^2+bp$)	9.5 μf

RATINGS (Design Center Values)

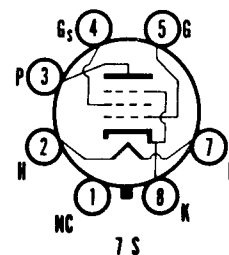
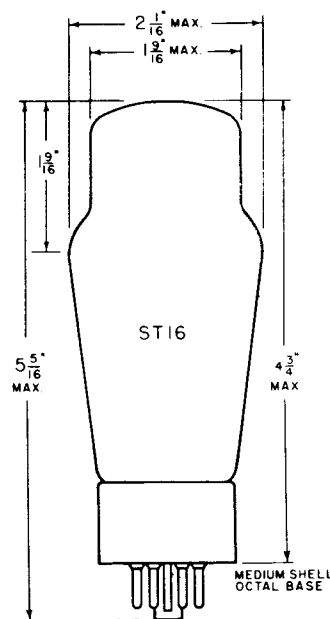
	Triode Connection	Pentode Connection
Plate Voltage	275	360 Volts Max.
Grid No. 2 Voltage		270 Volts Max.
Plate Dissipation	19	19.0 Watts Max.
Grid No. 2 Dissipation		2.5 Watts Max.
Heater-Cathode Voltage	180	180 Volts Max.
Grid No. 1 Circuit Resistance		
Fixed Bias	0.1	0.1 Megohms Max.
Cathode Bias	0.5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

CHARACTERISTICS AND TYPICAL OPERATION

	Triode Connection	Pentode Connection
Class A₁ Amplifier (Single Tube)		
Plate Voltage	250	300
Grid No. 2 Voltage	250	200
Grid No. 1 Voltage ¹	-20	-12.5
Peak A F Signal Voltage	20	12.5
Plate Current (Zero Signal)	40	48
Plate Current (Max. Signal)	44	55
Grid No. 2 Current (Zero Signal)	5.0	2.5
Grid No. 2 Current (Max. Signal)	7.3	4.7
Transconductance	4700	5300
Plate Resistance	1700	35000
Load Resistance	5000	4200
Power Output	1.4	6.5
Total Harmonic Distortion	5	10

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**

*Prepared and Released By The
TECHNICAL PUBLICATIONS SECTION
EMPORIUM, PENNSYLVANIA*

MARCH 1954

TYPICAL OPERATION CONT'D

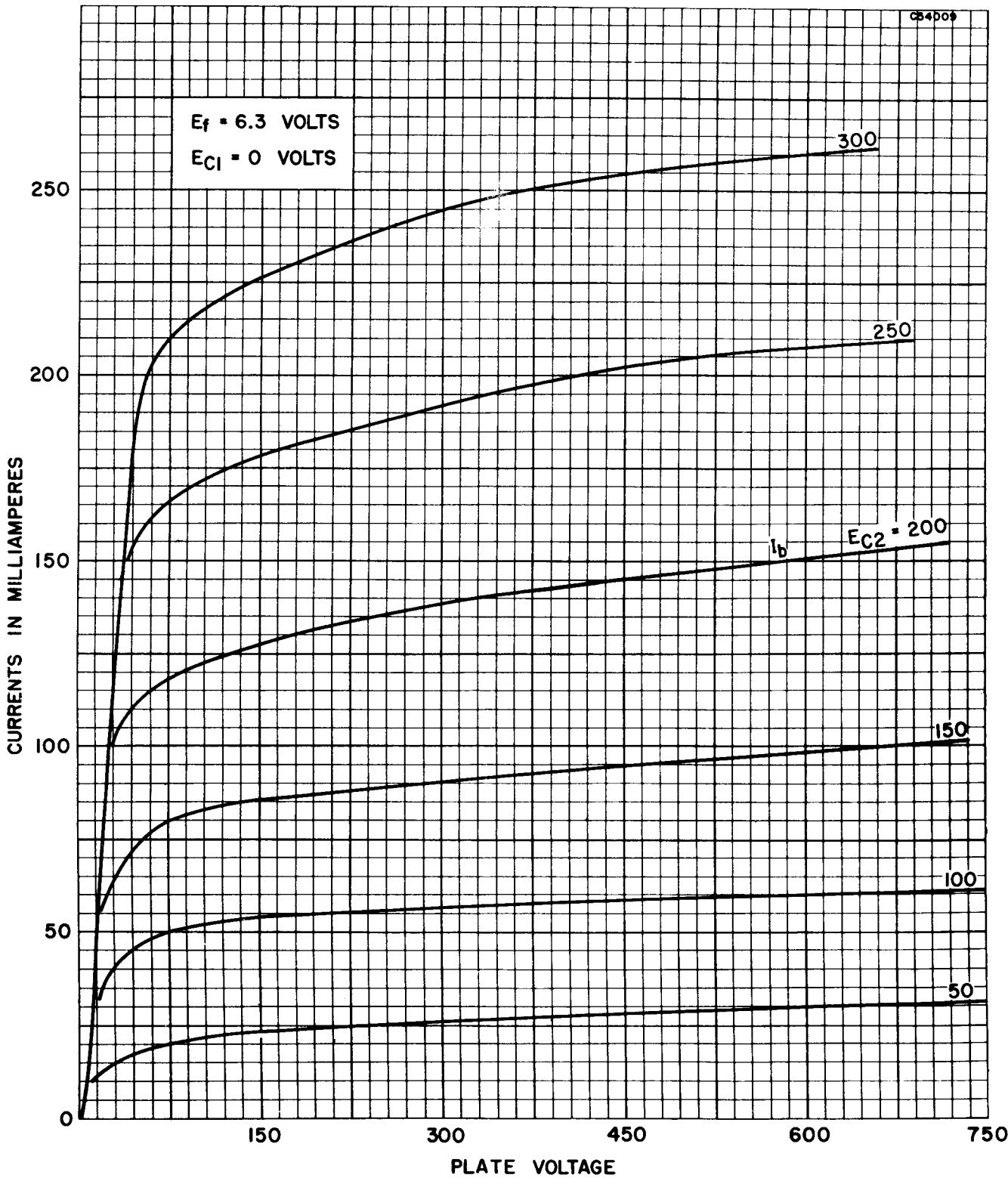
Push-Pull Amplifier

	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

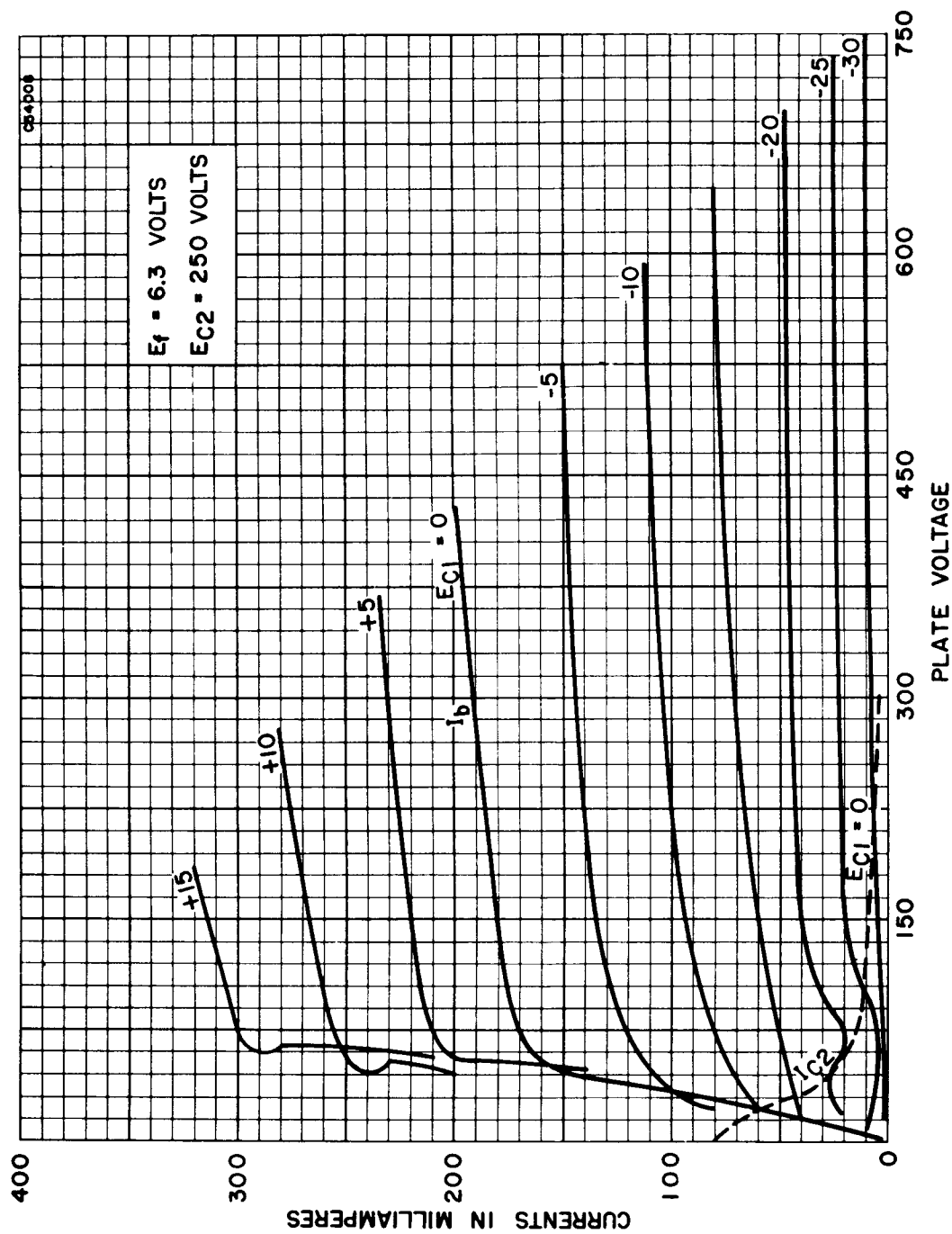
NOTE:

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.

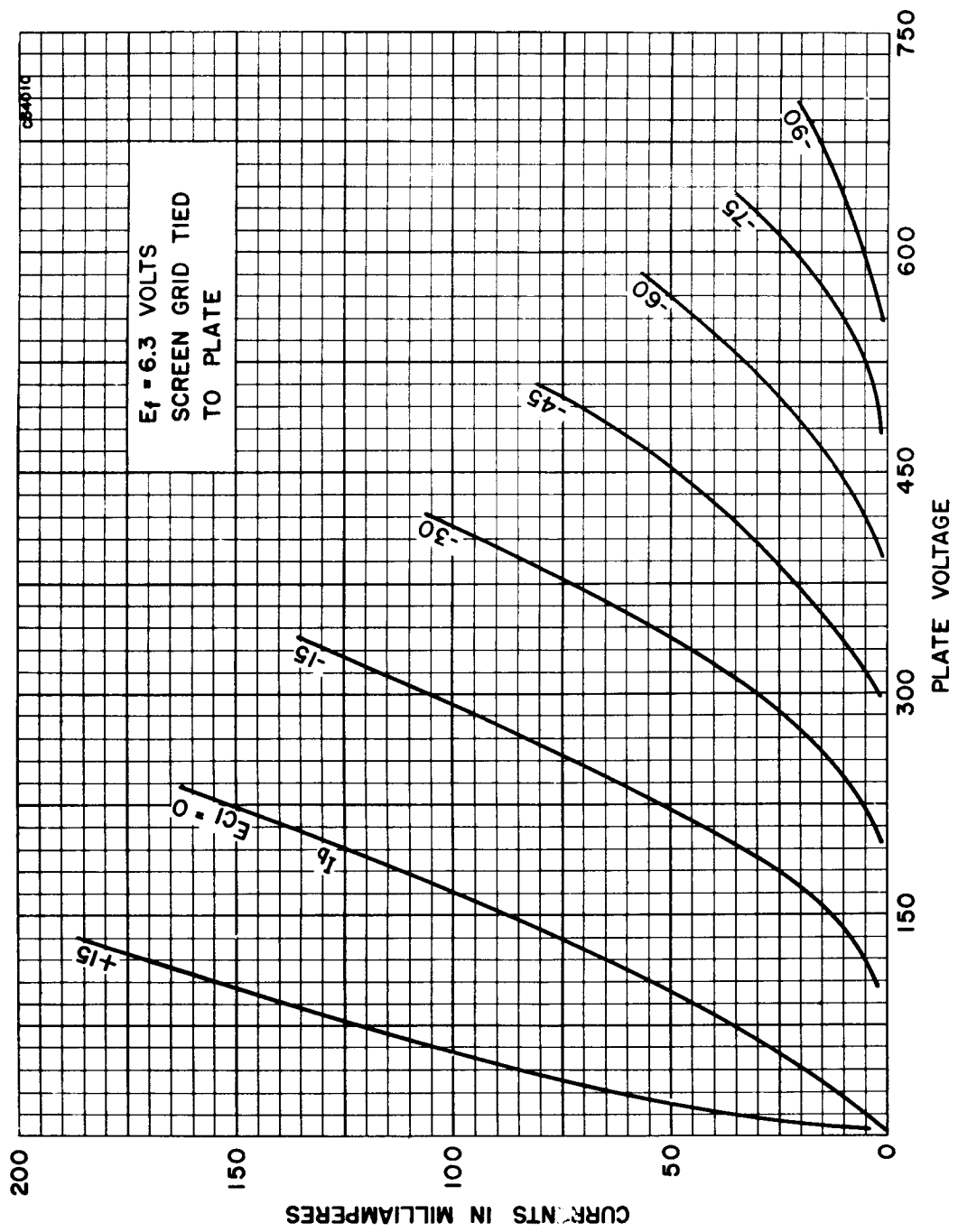
AVERAGE PLATE CHARACTERISTICS



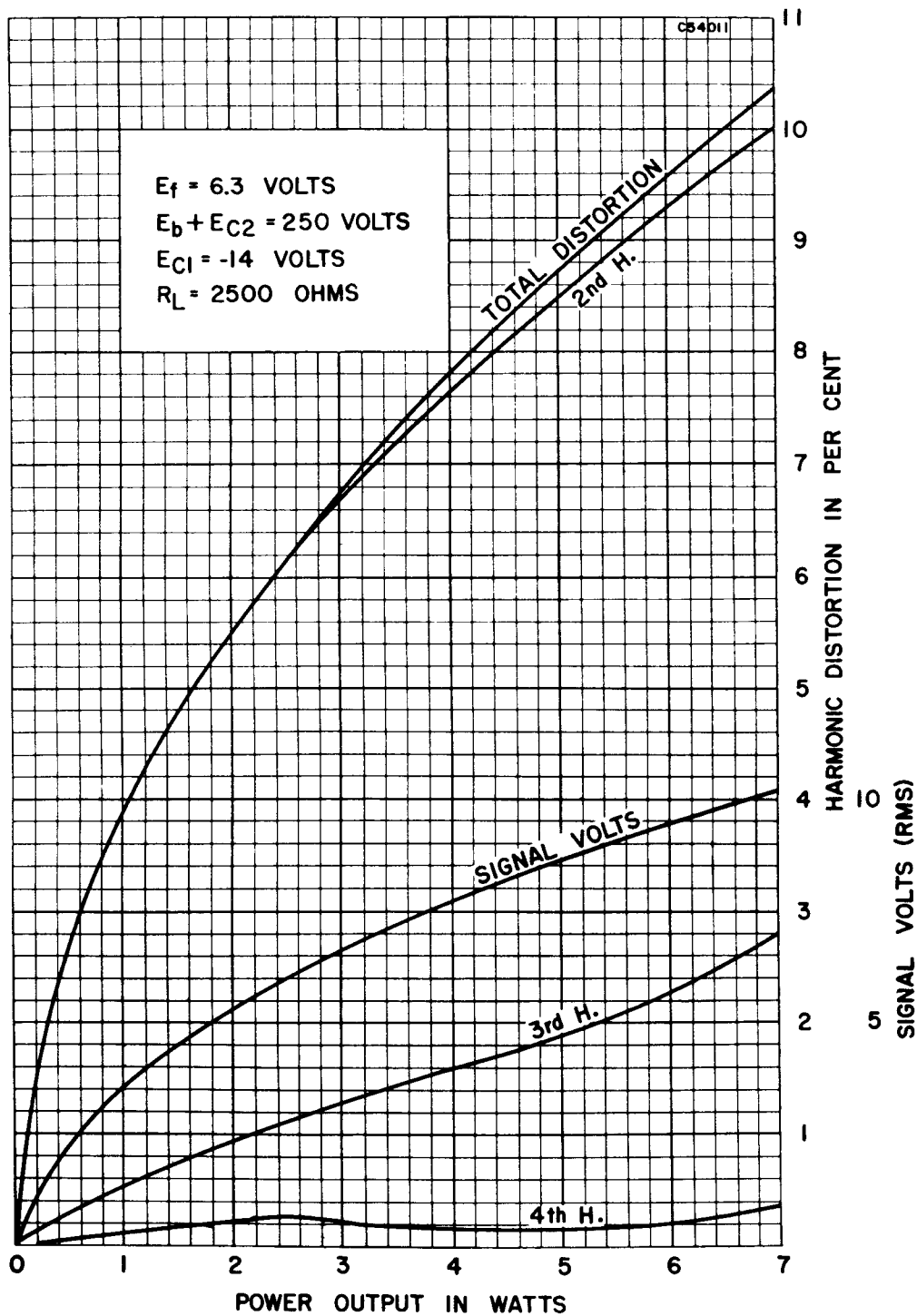
AVERAGE PLATE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS
TRIODE CONNECTED



AVERAGE OPERATION CHARACTERISTICS



AVERAGE OPERATION CHARACTERISTICS

