

MECHANICAL DATA

Bulb	T-5 1/2
Base	E7-1, Miniature Button, 7-Pin
Outline	5-2
Basing	7BA
Cathode	Coated Filament
Mounting Position	. Any

ELECTRICAL DATA

FILAMENT CHARACTERISTICS

	Series	Parallel ¹
Filament Voltage		
Battery Operation	3.2	1.6 Volts Abs. Max.
AC/DC Line Operation		
(Design Center)	2.6	1.3 Volts Max.
Filament Voltage (DC)	2.8	1.4 Volts
Filament Current	50	100 Ma

RATINGS (Design Center Values)

	Series Filament	Parallel ¹ Filament
Plate Voltage	90	90 Volts Max.
Screen Voltage	67.5	67.5 Volts Max.
Cathode Current ² (Zero Signal)	6	12 Ma Max.

CHARACTERISTICS AND TYPICAL OPERATION

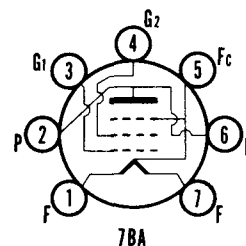
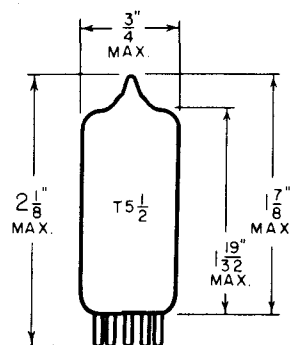
	Series Filament		Parallel ¹ Filament	
Class A ₁ Amplifier				
Plate Voltage	67.5	90	67.5	90 Volts
Screen Voltage	67.5	67.5	67.5	67.5 Volts
Negative Grid Voltage	-7	-7	-7	-7 Volts
Peak Signal Voltage	7	7	7	7 Volts
Zero Signal Plate Current	6.0	6.1	7.2	7.4 Ma
Zero Signal Screen Current	1.2	1.1	1.5	1.4 Ma
Transconductance	1400	1425	1550	1575 μ mhos
Load Resistance	5000	8000	5000	8000 Ohms
Plate Resistance (approx.)	0.1	0.1	0.1	0.1 Megohms
Total Harmonic Distortion	12	13	10	10 Percent
Maximum Signal Power				
Output	160	235	180	270 Milliwatts

NOTES:

1. For parallel operation, tie pins 1 and 7. Negative end of filament connected to pin No. 5.
2. When series filament connections are used, a shunting resistor should be used across the negative filament section (pins 1 and 5) to limit cathode current to the value specified. If other tubes in a series filament string contribute to the filament current, another resistor should be connected between pins 1 and 7 to carry any excess current over the ratings.

QUICK REFERENCE DATA

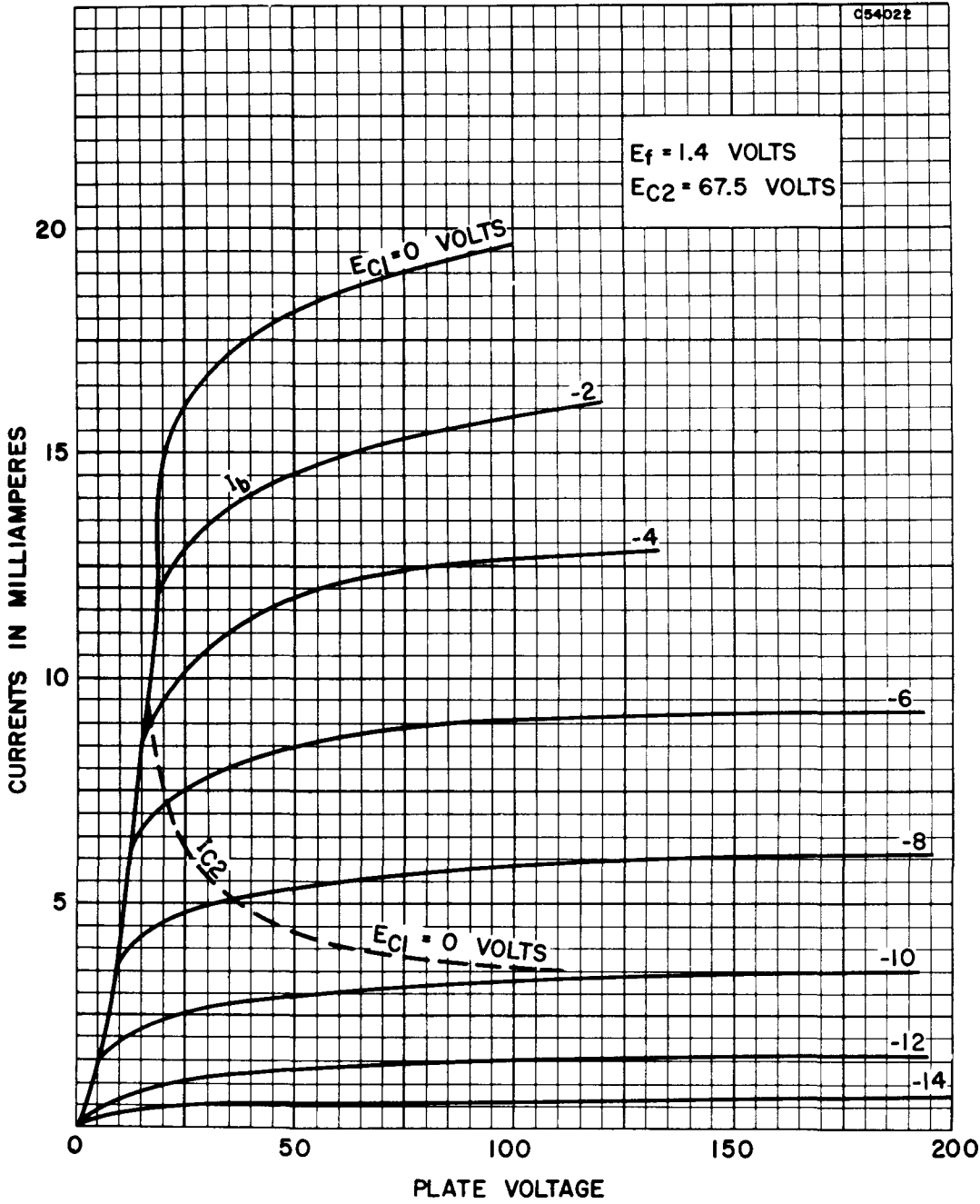
The Sylvania Type 3S4 is a miniature power amplifier pentode designed for service in portable, battery operated equipment. The electrical characteristics of the 3S4 are similar to those of the 1S4. The Type 3S4, however, is designed for operation from either a 1.4 volt or 2.8 volt filament supply.



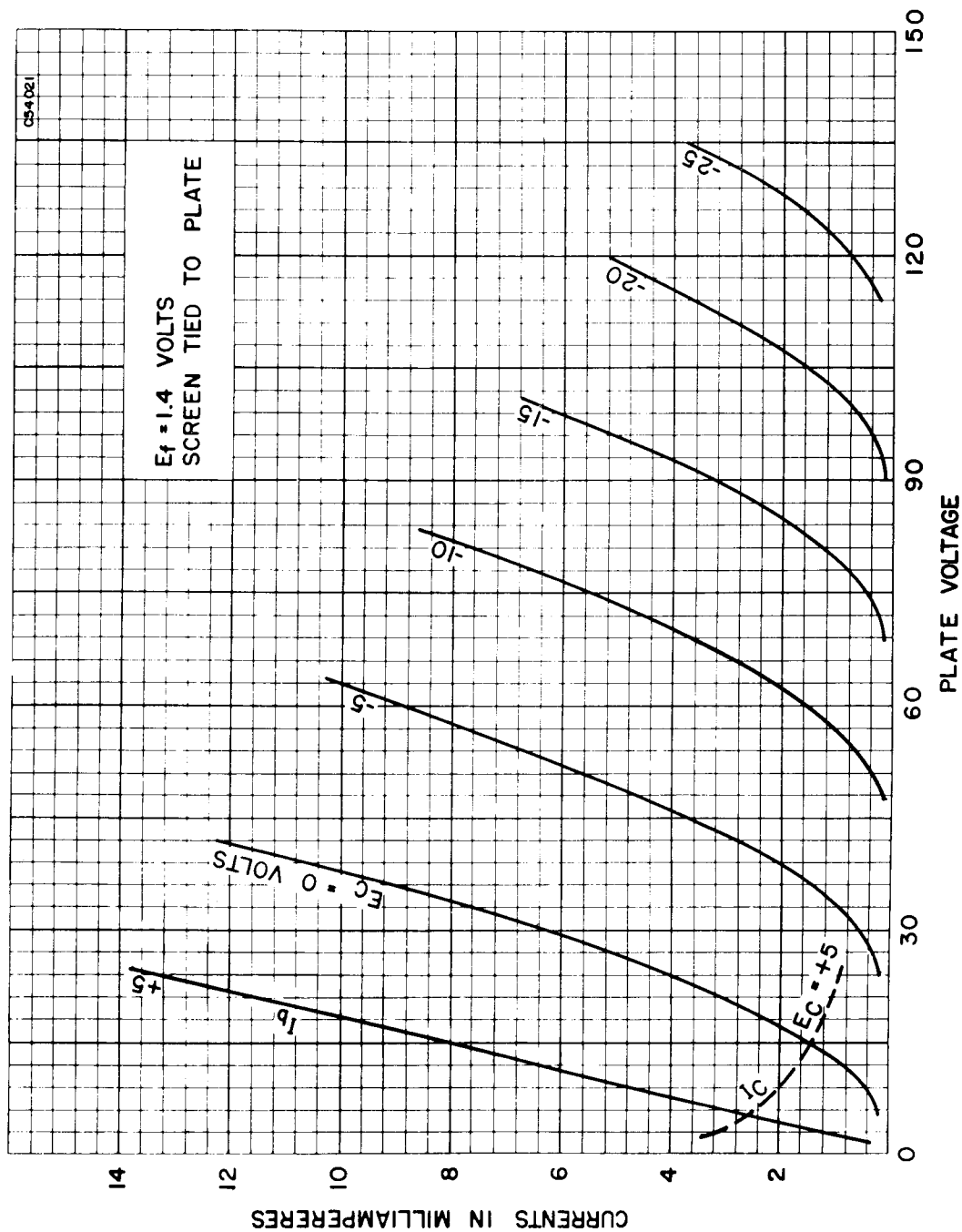
SYLVANIA ELECTRIC
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RADIO TUBE DIVISION

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MARCH 1954

AVERAGE PLATE CHARACTERISTICS



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AVERAGE OPERATION CHARACTERISTICS

