SYLVANIA

engineering data service

6SN7GTA
6SN7GTB
8SN7GTB
12SN7GTA

MECHANICAL DATA

Bulb	T-9
Base	B8-6, Intermediate Shell Octal 8-Pin or B8-58, Short Intermediate Shell Octal 8-Pin
Outline	9-11 or 9-41
Basing	8BD
Cathode	Coated Unipotential
Mounting Position	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

	6SN7GTA	6SN7GTB	8SN7GTB	12SN7GTA	
Heater Voltage	6.3	6.3	8.4	12.6 Volts	
Heater Current	600	600	450	300 Ma	
Heater Warm-up Time[1]		11	11	Seconds	
Heater-Cathode Voltage (Design Center Values)					
Heater Negative with Respect to Cathode					
Total DC and Peak.	200	200	200	200 Volts	Max.
Heater Positive with Respect to Cathode					
DC	100	100	100	100 Volts	Max.
Total DC and Peak.	200	200	200	200 Volts	Max.

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

	Section 1[2]	Section 2
Grid to Plate	4.0	3.8 $\mu\mu$f
Input	2.2	2.6 $\mu\mu$f
Output	0.7	0.7 $\mu\mu$f

RATINGS—Each Section (Design Center Values—Except as Noted)

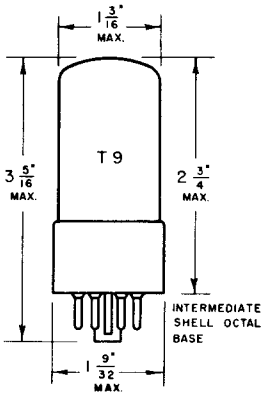
	Class A_1 Amplifier	Vertical[3] Deflection Amplifier	
Plate Voltage	450	450 Volts	Max.
Peak Positive Plate Voltage (Abs. Max.)		1500 Volts	
Plate Dissipation			
Each Plate	5.0	5.0 Watts	Max.
Both Plates	7.5	7.5 Watts	Max.
Peak Negative Grid Voltage		250 Volts	Max.
Cathode Current	20	20 Ma	Max.
Peak Cathode Current		70 Ma	Max.
Grid No. 1 Circuit Resistance			
Fixed Bias	1.0	Megohm	Max.
Cathode Bias	1.0	2.2 Megohms	Max.

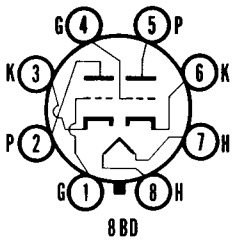
	Vertical[3] Deflection Oscillator	Horizontal[3] Deflection Oscillator	
Plate Voltage	450	450 Volts	Max.
Plate Dissipation			
Each Plate	5.0	5.0 Watts	Max.
Both Plates	7.5	7.5 Watts	Max.
Peak Negative Grid Voltage	400	600 Volts	Max.
Average Cathode Current	20	20 Ma	Max.
Peak Cathode Current	70	300 Ma	Max.
Grid Circuit Resistance	2.2	2.2 Megohms	Max.

QUICK REFERENCE DATA

The Sylvania Types 6SN7GTA, 6SN7GTB, 8SN7GTB, and 12-SN7GTA are medium mu, double triodes intended for use as horizontal multivibrators, phase inverters, and combined vertical oscillators and deflection amplifiers.

Types 6SN7GTB and 8SN7GTB have controlled heater warm-up time for series string operation.





SYLVANIA ELECTRIC PRODUCTS INC.
RADIO TUBE DIVISION
EMPORIUM, PA.

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CHARACTERISTICS AND TYPICAL OPERATION

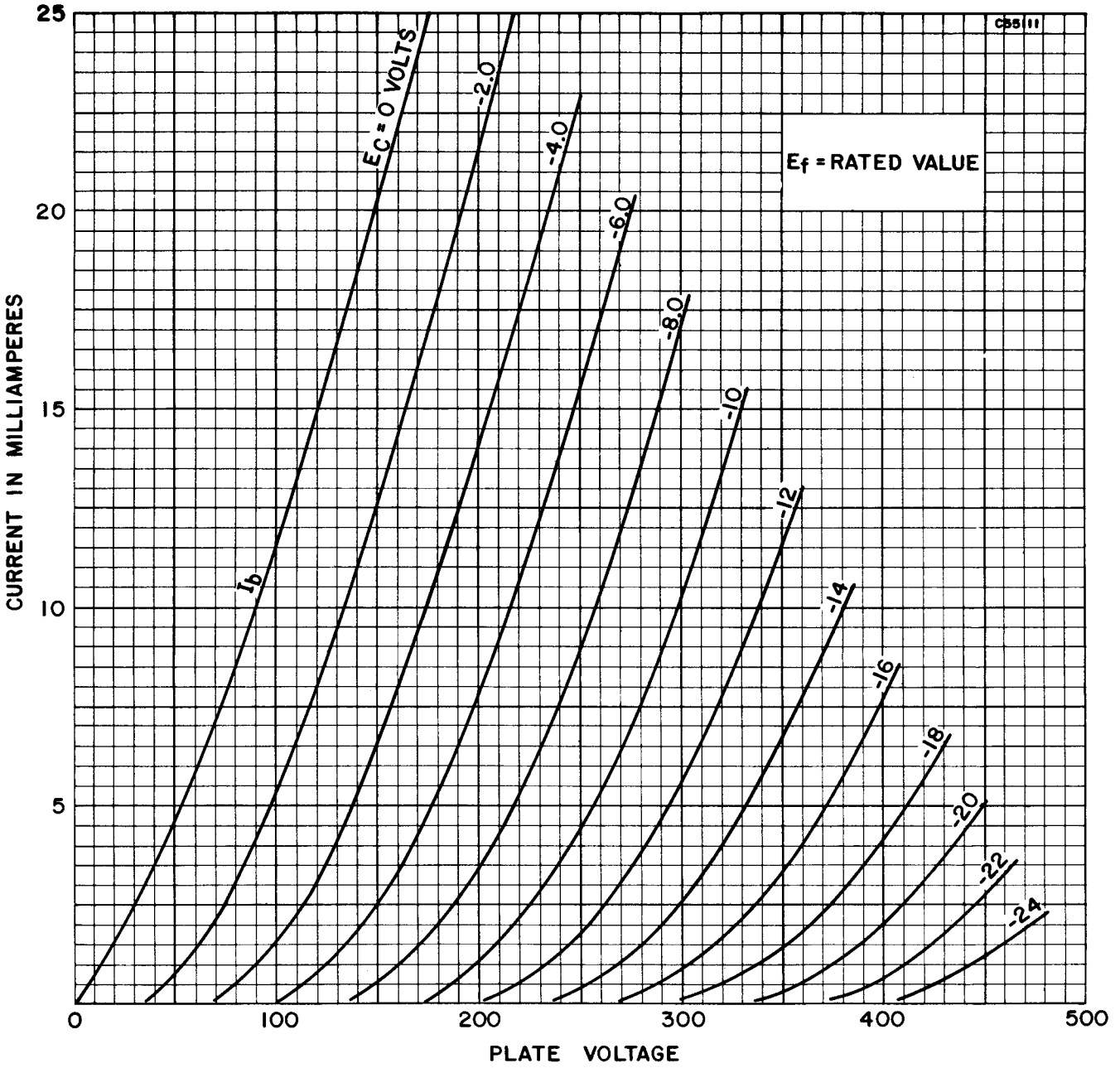
Class A_1 Amplifier—Each Section

Plate Voltage	90	250 Volts
Grid Voltage	0	-8.0 Volts
Plate Current	10	9.0 Ma
Transconductance	3000	2600 μmhos
Amplification Factor	20	20
Plate Resistance (Approx.)	6700	7700 Ohms
Plate Current at Ec = 12.5 Volts		1.3 Ma
Grid Voltage for Ib = 10 μa (Approx.)	-7.0	-18 Volts

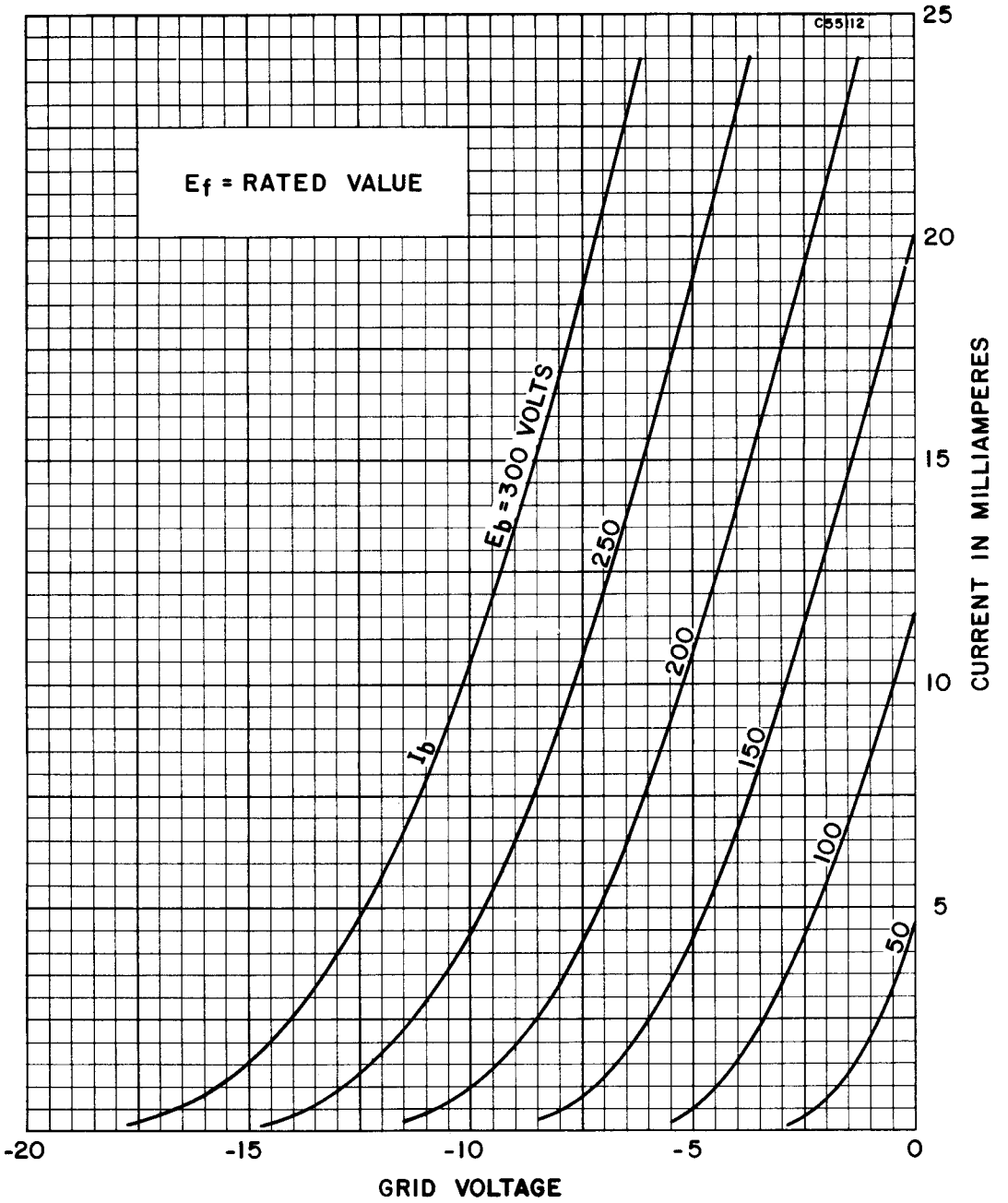
NOTES:

1. *Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of the rated heater voltage after applying four (4) times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to three (3) times the rated heater voltage divided by the rated heater current.*
2. *Section No. 1 connects to pins 4, 5 and 6. Section No. 2 connects to pins 1, 2 and 3.*
3. *For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Broadcasting Stations; Federal Communications Commission." The duty cycle of the voltage pulse must not exceed 15% of one scanning cycle.*

AVERAGE PLATE CHARACTERISTICS
(EACH SECTION)



AVERAGE TRANSFER CHARACTERISTICS
(EACH SECTION)



AVERAGE TRANSFER CHARACTERISTICS
(EACH SECTION)