

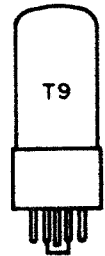
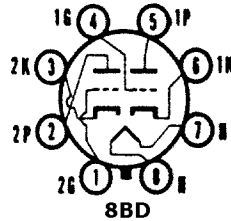
# HORIZONTAL MULTIVIBRATOR, PHASE INVERTER, or VERTICAL OSC. and AMP.

# 6SN7GTB

8SN7GTB, 12SN7GTA

## Medium Mu Double Triode

Construction .....Octal T-9  
 Base.....Octal 8 Pin, B8-6 or B8-58  
 Basing .....8BD  
 Outline .....9-11 or 9-41  
 Maximum Diameter .....1.188 In.  
 Maximum Seated Height .....2.750 In.  
 Maximum Overall Height .....3.312 In.



## ELECTRICAL DATA HEATER OPERATION

	12SN7GTA	8SN7GTB	6SN7GTB
Heater Voltage.....	12.6	8.4	6.3 Volts
Heater Current .....	300	450	600 Ma
Heater Warm-up Time .....	—	11	11 Seconds
Maximum Heater-Cathode Voltage			
Heater Negative with Respect to Cathode			200 Volts
Total DC and Peak.....			
Heater Positive with Respect to Cathode			100 Volts
DC .....			200 Volts
Total DC and Peak.....			

## DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

	Section 1 <sup>(1)</sup>	Section 2 <sup>(1)</sup>
Grid to Plate .....	4.0	3.8 Pf
Input .....	2.2	2.6 Pf
Output .....	0.7	0.7 Pf

## RATINGS (Design Center Rating System)

	Class A1 Amplifier	Vertical <sup>(2)</sup> Deflection Amplifier
Plate Voltage (Max.) .....	450	450 Volts
Peak Positive Plate Voltage (Abs. Max.) .....	—	1500 Volts
Plate Dissipation		
Each Plate (Max.) .....	5.0	5.0 Watts
Both Plates (Max.) .....	7.5	7.5 Watts
Peak Negative Grid Voltage (Max.) .....	—	250 Volts
Cathode Current (Max.).....	20	20 Ma
Peak Cathode Current (Max.) .....	—	70 Ma
Grid No. 1 Circuit Resistance		
Fixed Bias (Max.) .....	1.0	— Megohm
Cathode Bias (Max.) .....	1.0	2.2 Megohm
	Vertical <sup>(2)</sup> Deflection Oscillator	Horizontal <sup>(2)</sup> Deflection Oscillator
Plate Voltage (Max.) .....	450	450 Volts
Plate Dissipation		
Each Plate (Max.) .....	5.0	5.0 Watts
Both Plates (Max.) .....	7.5	7.5 Watts
Peak Negative Grid Voltage (Max.) .....	400	600 Volts
Average Cathode Current (Max.).....	20	20 Ma
Peak Cathode Current (Max.) .....	70	300 Ma
Grid Circuit Resistance (Max.) .....	2.2	2.2 Megohm

## CHARACTERISTICS AND TYPICAL OPERATION

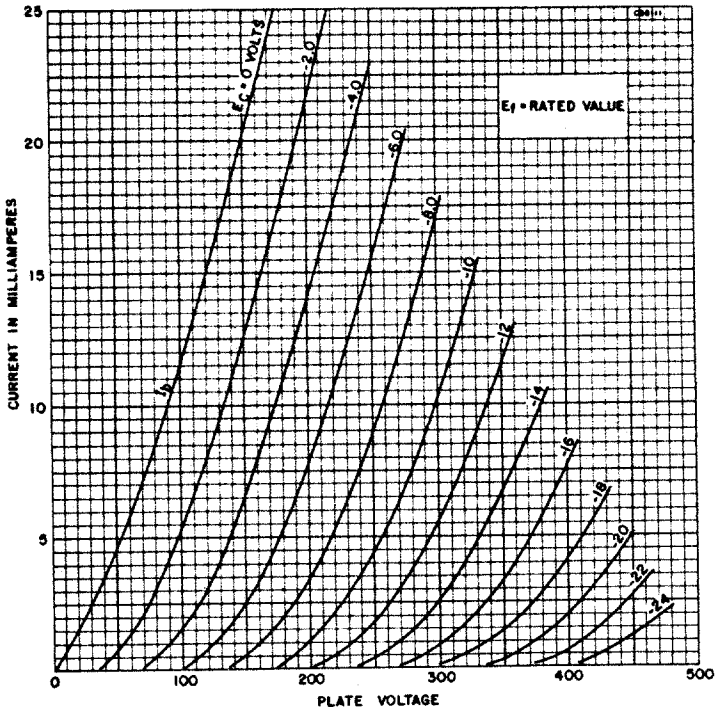
### Class A1 Amplifier (Each Section)

Plate Voltage .....	90	250 Volts
Grid Voltage .....	0	-8.0 Volts
Plate Current .....	10	9.0 Ma
Transconductance .....	3000	2600 $\mu$ mhos
Amplification Factor .....	20	20
Plate Resistance (Approx.) .....	6700	7700 Ohms
Plate Current at $E_c = 12.5$ Volts.....	—	1.3 Ma
Grid Voltage for $I_b = 10 \mu$ a (Approx.) .....	-7.0	-18 Volts

## NOTES:

- (1) Section No. 1 connects to pins 4, 5 and 6. Section No. 2 connects to pins 1, 2 and 3.
- (2) For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Broadcast Stations; Federal Communications Commission," the duty cycle of the voltage pulse must not exceed 15% of one horizontal scanning cycle.

## AVERAGE PLATE CHARACTERISTICS (Each Section)



## AVERAGE TRANSFER CHARACTERISTICS (Each Section)

