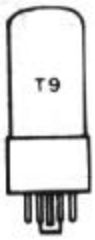
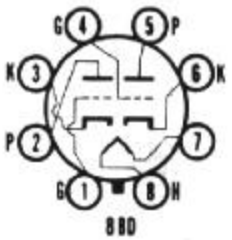
SYLVANIA TYPE 6SN7GTA
6SN7GTB
8SN7GTB
12SN7GTA





8BD

MEDIUM-MU DUO TRIODE

MECHANICAL DATA

Bulb	T-9, Outline 9-11 or 9-41
Base	Intermediate Shell Octal 8-Pin or Short Intermediate Shell Octal 8-Pin
Basing	8BD
Mounting Position	Any

ELECTRICAL DATA[1]

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		11	11		Seconds
Maximum Heater-Cathode Voltage					
Total D C and Peak				200	Volts
D C, Heater Positive with Respect to Cathode				100	Volts

DIRECT INTERELECTRODE CAPACITANCES—Unshielded (Approx.)

	Section 1[2]	Section 2
Grid to Plate	4.0	3.8 μμf
Input	2.2	2.6 μμf
Output	0.7	0.7 μμf

MAXIMUM RATINGS (Design Center Values—Except as Noted)

	Class A[1] Amplifier	Vertical[3] Deflection Amplifier	
Plate Voltage	450	450	Volts
Peak Positive Plate Voltage (Abs. Max.)		1500	Volts
Plate Dissipation			
Each Plate	5.0	5.0	Watts
Both Plates	7.5	7.5	Watts
Peak Negative Grid Voltage		250	Volts
Cathode Current	20	20	Ma
Peak Cathode Current		70	Ma
Grid Circuit Resistance			
Fixed Bias	1.0		Megohm
Cathode Bias	1.0	2.2	Megohms

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

CHARACTERISTICS AND TYPICAL OPERATION

Class A_1 Amplifier

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

NOTES:

1. All ratings, operating conditions and characteristics are for each section except where otherwise stated.
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, the duty cycle of the voltage pulse must not exceed 15% of one scanning cycle.

APPLICATION

The Sylvania Types 6SN7GTA, 6SN7GTB, 8SN7GTB and 12SN7GTA are medium mu duo triodes. They may be used as combined vertical oscillators and vertical deflection amplifiers in television receivers or in audio amplifier service. It is electrically equivalent to the 6SN7GT except for higher voltage and dissipation ratings.

Data for use in Resistance Coupled Amplifiers is given in the Appendix.