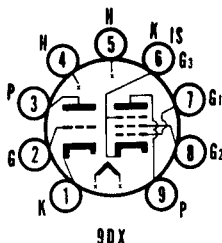


SYLVANIA TYPE 6BA8 6BA8A 8BA8A



TRIODE PENTODE

MECHANICAL DATA

Bulb.....	T-6 1/2, Outline 6-3
Base.....	E9-1, Miniature Button, 9-Pin
Basing.....	9DX
Mounting Position.....	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

	6BA8	6BA8A	8BA8A
Heater Voltage.....	6.3	6.3	8.4 Volts
Heater Current.....	600	600	450 Ma
Heater Warm-up Time.....	11	11	11 Seconds
Maximum Heater-Cathode Voltage			
D C and Peak.....			200 Volts
D C, Heater Positive with Respect to Cathode.....			100 Volts

DIRECT INTERELECTRODE CAPACITANCES

	Shielded ¹	Unshielded
Triode		
Grid to Plate.....	2.2	2.2 μmf
Input.....	2.7	2.5 μmf
Output.....	1.9	0.4 μmf
Pentode		
Grid to Plate.....	.030	0.036 μmf Max
Input.....	10.0	10.0 μmf
Output.....	4.5	3.6 μmf
Coupling		
Pentode Grid No. 1 to Triode Plate.....	.003	.006 μmf Max
Pentode Plate to Triode Grid.....	.006	.016 μmf Max
Pentode Plate to Triode Plate.....	.023	.150 μmf Max

MAXIMUM RATINGS (Design Center Values)

	Triode	Pentode
Plate Voltage.....	300	300 Volts
Grid No. 2 Supply Voltage.....		300 Volts
Grid No. 2 Voltage.....	See Rating Chart for Type 6AM8	
Plate Dissipation.....	2.0	3.25 Watts
Grid No. 2 Dissipation.....		1.0 Watt
Negative Grid No. 1 Voltage.....		50 Volts
Positive Grid No. 1 Voltage.....		0 Volts
Grid No. 1 Circuit Resistance		
Fixed Bias.....	0.5	0.25 Megohm
Self Bias.....	1.0	1.0 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

	Triode	Pentode
Class A₁ Amplifier		
Plate Voltage.....	200	200 Volts
Grid No. 2 Voltage.....		150 Volts
Grid No. 1 Voltage.....	-8	0 Volts
Cathode Bias Resistor.....		180 Ohms
Amplification Factor.....	18	
Plate Resistance (approx.).....	6700	400,000 Ohms
Transconductance.....	2700	9000 μmhos
Plate Current.....	8.0	13 Ma
Grid No. 2 Current.....		3.5 Ma
Grid No. 1 Voltage for $I_b = 10 \mu\text{a}$ (approx.).....	-16	-10 Volts

PLATE KNEE CHARACTERISTICS (6BA8A, 8BA8A)

$E_b = 65\text{V}$, $E_{c2} = 150\text{V}$, $E_{c1} = 0\text{V}$
 $I_b = 42\text{ Ma}$, $I_{c2} = 12.5\text{ Ma}$

NOTES:

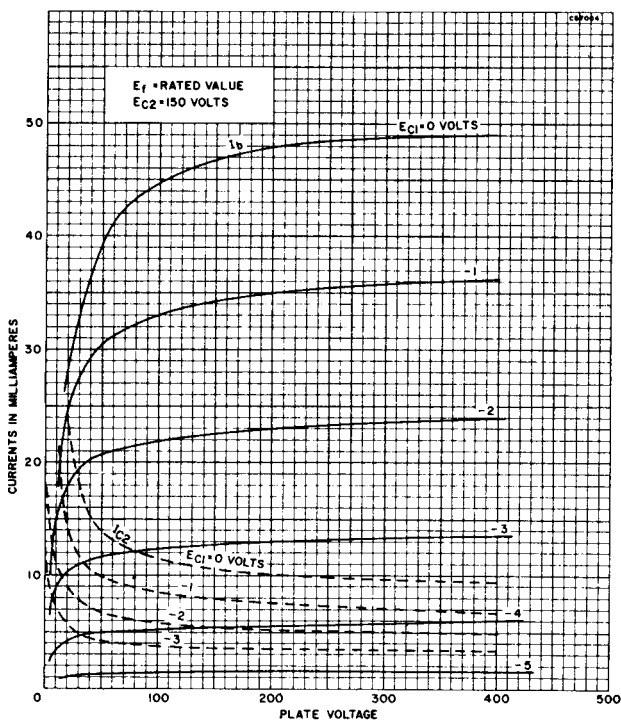
1. Shield No. 315 tied to cathode base pin of section under test.
2. The pentode section curve applies to Types 6BA8A and 8BA8A, only.

APPLICATION

The Sylvania Types 6BA8, 6BA8A and 8BA8A are intended for service in television receivers employing a series heater string. The triode may be used as a sync clipper or sync separator. The pentode section is designed primarily to serve as a video amplifier. For information on specially controlled heaters for series string operation refer to the SERIES STRING section of the Appendix.

6BA8, 6BA8A, 8BA8A (Cont'd)

AVERAGE PLATE CHARACTERISTICS PENTODE SECTION



AVERAGE PLATE CHARACTERISTICS TRIODE SECTION

