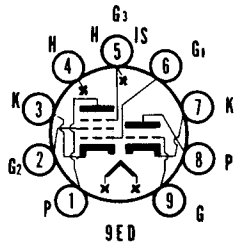
SYLVANIA TYPE 6AZ8

MEDIUM MU TRIODE
SEMI-REMOTE CUTOFF PENTODE



MECHANICAL DATA

Bulb	T-6½
Base	E9-1, Small Button 9-Pin
Outline	6-2
Basing	9ED
Cathode	Coated Unipotential
Mounting Position	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage	6.3 Volts
Heater Current	450 Ma
Heater-Cathode Voltage (Design Center Values)	
Heater Negative with Respect to Cathode	
Total D C and Peak	200 Volts Max.
Heater Positive with Respect to Cathode	
D C	100 Volts Max.
Total D C and Peak	200 Volts Max.

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Triode Section	
Grid to Plate	1.7 μμf
Grid to (h + k + I.S.)	2.0 μμf
Plate to (h + k + I.S.)	1.7 μμf
Pentode Section	
Grid No. 1 to Plate	0.02 μμf Max.
Grid No. 1 to (h + k + g2 + g3 + I.S.)	6.5 μμf
Plate to (h + k + g2 + g3 + I.S.)	2.2 μμf
Coupling	
Triode Grid to Pentode Plate	0.027 μμf Max.
Pentode Grid No. 1 to Triode Plate	0.020 μμf Max.
Pentode Plate to Triode Plate	0.045 μμf Max.

MAXIMUM RATINGS (Design Center Values)

	Triode Section	Pentode Section
Plate Voltage	300	300 Volts
Grid No. 2 Supply Voltage		300 Volts
Grid No. 2 Voltage	See 6AM8 Rating Chart	
Positive Grid No. 1 Voltage	0	0 Volts
Plate Dissipation	2.6	2.0 Watts
Grid No. 2 Input:		
For Grid No. 2 Voltages up to 150 Volts		0.5 Watt
For Grid No. 2 Voltages Between 150 and 300 Volts	See 6AM8 Rating Chart	
Maximum Circuit Values[1]		
Cathode Bias	1.0	1.0 Megohms
Fixed Bias	0.5	0.25 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

Class A_1 Amplifier	Triode Section	Pentode[2] Section
Plate Supply Voltage	200	200 Volts
Grid No. 2 Supply Voltage		150 Volts
Grid No. 1 Voltage	−6	Volts
Cathode Bias Resistor		180 Ohms
Plate Current	13	9.5 Ma
Grid No. 2 Current		3 Ma
Transconductance	3300	6000 μmhos
Amplification Factor	19	
Plate Resistance (approx.)	5750	300,000 Ohms
Grid No. 1 Voltage (approx.) for Plate Current of 10 μa	−19	Volts
Grid No. 1 Voltage (approx.) for Transconductance of 100 μmhos		−12.5 Volts

NOTES:

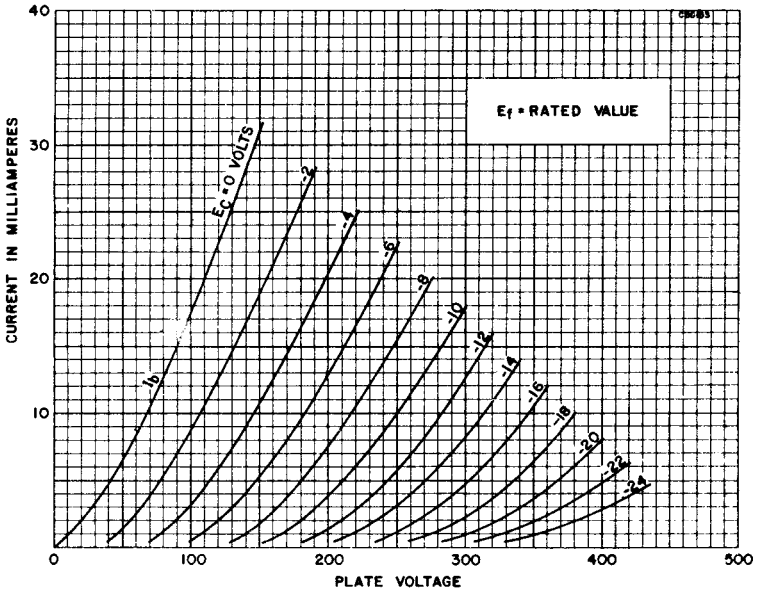
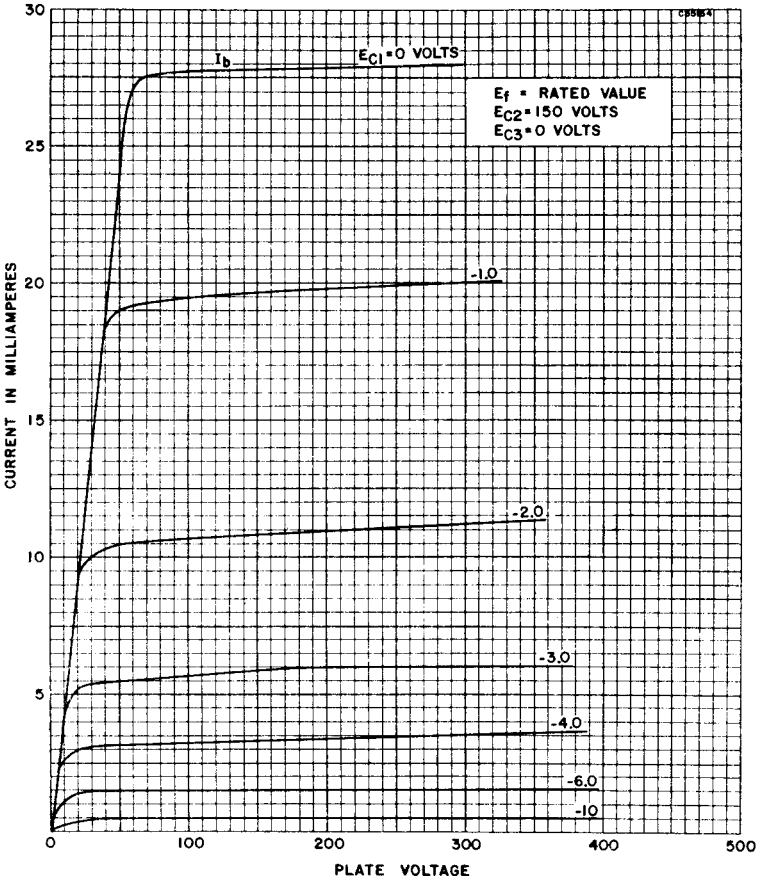
1. If either unit is operated at maximum rated conditions, Grid No. 1 Circuit Resistances for both units should not exceed the stated values.
2. The heater-cathode voltage should not exceed the value of the operating cathode bias because the voltage between the heater and cathode is also applied between the cathode and Grid No. 3. The net result is the make Grid No. 3 Negative with respect to cathode with possible change in tube characteristics.

APPLICATION

The 6AZ8 is a miniature medium mu triode and semi-remote cutoff pentode designed for application in television receivers. The triode is well suited for operation as a sync separator, sync clipper, low frequency oscillator and phase splitter. The pentode may be used as an i f amplifier, video amplifier, a g c amplifier, and reactance tube.

6AZ8 (Cont'd)

AVERAGE PLATE CHARACTERISTICS
(TRIODE SECTION)



AVERAGE PLATE CHARACTERISTICS
(PENTODE SECTION)