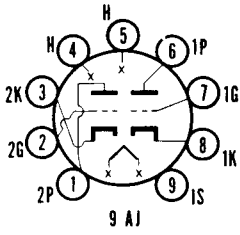
SYLVANIA TYPE 6BZ8
4BZ8

MEDIUM MU DUO TRIODE
SEMI-REMOTE CUTOFF



MECHANICAL DATA

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

ELECTRICAL DATA

HEATER CHARACTERISTICS

	4BZ8	6BZ8
Heater Voltage (ac or dc)	4.2	6.3 Volts
Heater Current	600	400 Ma
Heater Warm-up Time[1]	11	Seconds
Heater-Cathode Voltage (Design Max. Values)[2]		
Heater Negative with Respect to Cathode		200 Volts
Heater Positive with Respect to Cathode		200 Volts

DIRECT INTERELECTRODE CAPACITANCES (Shielded)[3]

Cascode Operation	Section No. 1	Section No. 2
Grid to Plate	1.15	— μμf
Plate to Cathode	—	0.15 μμf
Triode No. 1 Plate to Triode No. 2 Plate	0.010	— μμf

RATINGS[2] (Design Maximum Values)

Plate Voltages	250 Volts Max.
Plate Dissipation	2.2 Watts Max.
Cathode Current	20 Ma Max.
Grid Circuit Resistance	0.1 Megohm Max.

CHARACTERISTICS

Class A_1 Amplifier	
Plate Voltage	125 Volts
Cathode Resistor	100 Ohms
Plate Current	10 Ma
Transconductance	8000 Ohms
Amplification Factor	45
Plate Resistance	5600 Ohms
Grid Voltage (approx.) for Gm = 50 μmhos	−13 Volts
Cascode Operation at Eb = 250 Volts, E_{c_1} = −0.5 Volts	
Transconductance	10,000 μmhos
Plate Current	15 Ma

NOTES:

1. Heater Warm-up Time is defined as the time required for the voltage across the heater to reach 80% of its rated value 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 rated heater voltage divided by rated heater current.
2. Design-Maximum Ratings are the limiting values expressed with respect to bogie tubes at which satisfactory tube life can be expected to occur. To obtain satisfactory circuit performance, therefore, the equipment designer must establish the circuit design so that no design-maximum value is exceeded with a bogie tube under the worst probable operating conditions with respect to supply-voltage variation, equipment component variation, equipment control adjustment, load variation, and environmental conditions.
3. Use external shield No. 315.

APPLICATION

The Sylvania Type 6BZ8 is a miniature, medium mu, semi-remote cutoff double triode designed for use in low noise VHF amplifier application and particularly for cascode operation.
The 4BZ8 is identical to the 6BZ8 except for heater characteristics. The 4BZ8 has a 600 ma heater and controlled heater warm-up time and is intended for use in series heater string television receivers.