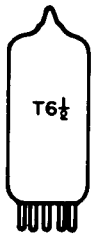
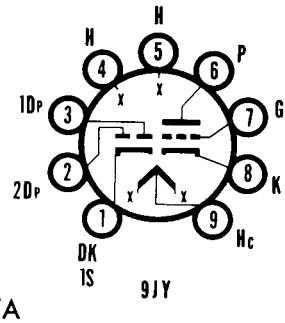


SYLVANIA TYPE 12DV7



MECHANICAL DATA

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

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage[1]	12.6 Volts
Heater Current	150 Ma
Heater-Cathode Voltage (Design Maximum Values)[2]	
Heater Negative with Respect to Cathode	16 Volts
Heater Positive with Respect to Cathode	16 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Grid to Plate	1.6 μμf
Input: g to (h + Tk)	1.3 μμf
Output: p to (h + Tk)	0.38 μμf
Diode Plate No. 1 to Grid	0.005 μμf Max.
Diode Plate No. 2 to Grid	0.005 μμf Max.
Diode Plate No. 1 to Diode Plate No. 2	0.17 μμf Max.

MAXIMUM RATINGS (Design Maximum Values)[2]

Plate Voltage	16 Volts
Cathode Current	20 Ma
Grid Circuit Resistance	10 Megohms
Average Diode Current, Each Diode	1.0 Ma

CHARACTERISTICS AND TYPICAL OPERATION

Class A_1 Amplifier

Plate Voltage	12.6 Volts
Grid Voltage[3]	
Grid Resistor	2.2 Megohms
Plate Current	400 μa
Transconductance	750 μmhos
Amplification Factor	14
Plate Resistance	19,000 Ohms
EC for Ib = 10 μa (approx.)	−2 Volts
Average Diode Current with 10 Volts Applied (Each Diode)[4]	1.3 Ma

NOTES:

1. This tube is intended for use in automobile radios operated from a nominal 12 volt battery. Design of the tube is such that the heater will operate satisfactorily over the range 10.0 volts to 15.9 volts, and that the maximum ratings provide a safety factor for the wide voltage variation encountered with this type of supply.
2. Design-Maximum Ratings are limiting values of operating and environmental conditions applicable to a bogey electron device of a specified type as defined by its published data, and should not be exceeded under the worst probable conditions.
   The device manufacturer chooses these values to provide acceptable serviceability of the device, taking responsibility for the effects of changes in operating conditions due to variations in device characteristics.
   The equipment manufacturer should design so that initially and throughout life no design-maximum value for the intended service is exceeded with a bogey device under the worst probable operating conditions with respect to supply-voltage variation, equipment component variation, equipment control adjustment, load variation, signal variation, and environmental conditions.
3. Average contact potential bias developed across specified grid resistor.
4. Test condition only.

APPLICATION

The Sylvania Type 12DV7 is a miniature double diode, medium mu triode intended for use as a second detector audio amplifier.
It is designed for operation where the heater and plate voltages are supplied directly from a 12 volt automotive storage battery.