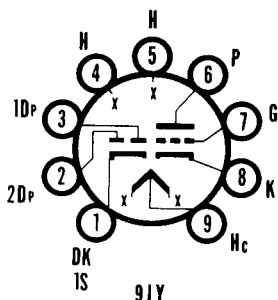


SYLVANIA TYPE 12DV7



MECHANICAL DATA

Bulb.....	T-6 1/2
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 μ f
Input: g to (h + Tk).....	1.3 μ f
Output: p to (h + Tk).....	0.38 μ f
Diode Plate No. 1 to Grid.....	0.005 μ f Max.
Diode Plate No. 2 to Grid.....	0.005 μ f Max.
Diode Plate No. 1 to Diode Plate No. 2.....	0.17 μ f 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 A₁ Amplifier

Plate Voltage.....	12.6 Volts
Grid Voltage ³	
Grid Resistor.....	2.2 Megohms
Plate Current.....	400 μ a
Transconductance.....	750 μ mhos
Amplification Factor.....	14
Plate Resistance.....	19,000 Ohms
EC for I _b = 10 μ a (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.