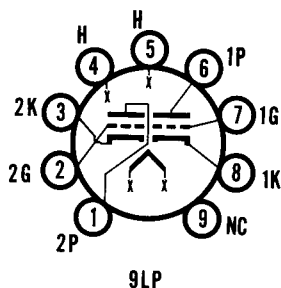


SYLVANIA TYPE 6EV7 **DUOTRIODE**



MECHANICAL DATA

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

ELECTRICAL DATA

HEATER CHARACTERISTICS AND RATINGS

Characteristics

Heater Voltage ¹	6.3 Volts
Heater Current ²	600 Ma

Ratings (Design Maximum Values)

Heater Voltage ³	6.3 ± 0.6 Volts
Maximum Heater-Cathode Voltage	
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)

	Section 1 ⁴	Section 2 ⁴
Grid to Plate.....	3.4	3.4 μμf
Input: g to (h+k).....	3.0	3.0 μμf
Output: p to (h+k).....	0.33	0.23 μμf

Ratings (Design Maximum Values) Each Section

Relay Control Service

Plate Voltage.....	300 Volts Max.
Plate Dissipation ⁵	2.5 Watts Max.
Plate Dissipation ¹	4.5 Watts Max.
Positive Grid Voltage.....	0 Volts Max.
Cathode Current.....	20 Ma Max.
Grid Circuit Resistance.....	3.9 Megohms Max.

CHARACTERISTICS AND TYPICAL OPERATION

Class A1 Amplifier—Each Section

Plate Voltage.....	250 Volts
Grid Voltage.....	-2 Volts
Plate Current.....	9.2 Ma
Transconductance.....	5200 μmhos
Amplification Factor.....	60
Plate Resistance.....	11,500 Ohms
Ec for Ib = 100 μa.....	-9 Volts

RELAY CONTROL OPERATION (Each Section)

	"ON" Time More Than 30 Sec. in Any 2 Min. Interval	"ON" Time Less Than 30 Sec. in Any 2 Min. Interval
Plate Supply Voltage.....	150	250 Volts
Zero Bias Plate Current.....	10	18.5 Ma
Plate Lead (Relay).....	2500	2500 Ohms
Ec for Ib = 100 μa (approx.)....	-5	-9 Volts

NOTES:

1. For parallel operation of heaters, equipment should be designed that at normal supply voltage bogey tubes will operate at this value of heater voltage.
2. The bogey value of current is obtained when operating the heater at the specified 6.3 volts.
3. Heater voltage supply variations shall be restricted to maintain heater voltage within the specified tolerance.
4. Section No. 1 connects to Pins 6, 7, and 8.
Section No. 2 connects to Pins 1, 2 and 3.

SYLVANIA TYPE 6EV7 (Cont'd)

5. Plate dissipation can be as high as 2.5 watts when the "ON" time exceeds 30 seconds in any 2 minute interval.
6. Plate dissipation can be as high as 4.5 watts when the "ON" time does not exceed 30 seconds in any 2 minute interval.

APPLICATION

The Sylvania Type 6EV7 is a miniature high-mu twin triode having separate cathodes. It is designed for service as a relay-control tube in remote tuning units of television receivers.