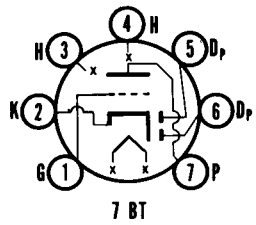


# SYLVANIA TYPE 18GE6A

DUO DIODE TRIODE



## MECHANICAL DATA

Bulb.....	T-5 1/2
Base.....	E7-1, Miniature Button 7-Pin
Outline.....	5-2
Basing.....	7BT
Cathode.....	Coated Unipotential
Mounting Position.....	Any

## ELECTRICAL DATA

### HEATER CHARACTERISTICS AND RATINGS

#### Average Characteristics

Heater Voltage.....	<b>Series Operation</b> 18 Volts
Heater Current <sup>1</sup> .....	100 Ma
Heater Warm-up Time <sup>2</sup> .....	20 Seconds

#### Ratings (Design Maximum Values)

Heater Current <sup>3</sup> .....	<b>Min-Max</b> 94-106 Ma
Maximum Heater-Cathode Voltage	
Heater Negative with Respect to Cathode	
Total D C and Peak.....	100 Volts
Heater Positive with Respect to Cathode	
Total D C and Peak.....	100 Volts

### DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Grid to Plate.....	1.8 $\mu\mu\text{f}$
Input: g to (h+k).....	2.4 $\mu\mu\text{f}$
Output: p to (h+k).....	0.2 $\mu\mu\text{f}$
Grid to Diode No. 2 Plate.....	0.2 $\mu\mu\text{f}$ Max.

### RATINGS (Design Maximum System)

Plate Voltage.....	150 Volts Max.
Plate Dissipation.....	0.5 Watt Max.
Diode Plate Current, (Each Diode).....	1.0 Ma Max.

### CHARACTERISTICS AND TYPICAL OPERATION

#### Class A1 Amplifier

Plate Voltage.....	100 Volts
Grid Voltage.....	-1 Volts
Plate Current.....	1.0 Ma
Plate Resistance.....	40,000 Ohms
Transconductance.....	1700 $\mu\text{mhos}$
Amplification Factor.....	70
Average Diode Current, Each Diode	
With 10 Volts D C Applied <sup>4</sup> .....	2.0 Ma

### NOTES:

1. For series operation of heaters, equipment should be designed that at normal supply voltage bogey tubes will operate at this value of heater current.
2. Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of the rated heater voltage 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 the rated heater voltage divided by the rated heater current.
3. Heater voltage supply variations shall be restricted to maintain heater current within the specified values.
4. Test condition only.

## APPLICATION

The Sylvania 18GE6A is a miniature high mu triode double diode featuring a 100 ma heater controlled for heater warm-up time. This tube is designed for detector-amplifier applications in AC/DC type radio receivers. Type 18GE6A replaces obsolete Type 18GE6.