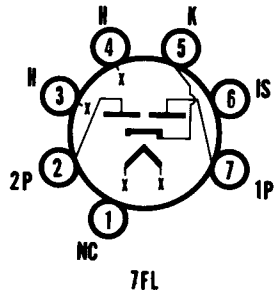


# SYLVANIA TYPE 2EN5



## MECHANICAL DATA

Bulb.....	T-5 $\frac{1}{2}$
Base.....	E7-1, Miniature Button 7-Pin
Outline.....	5-2
Basing.....	7FL
Cathode.....	Coated Unipotential
Mounting Position.....	Any

## ELECTRICAL DATA

### HEATER CHARACTERISTICS

Heater Voltage.....	2.1 Volts
Heater Current.....	450 Ma
Heater Warm-up Time <sup>1</sup> .....	11 Seconds
Heater-Cathode Voltage (Design Maximum Values) <sup>2</sup>	
Heater Negative with Respect to Cathode	
Total D C and Peak.....	200 Volts
Heater Positive with Respect to Cathode	
D C.....	100 Volts
Total D C and Peak.....	200 Volts

### DIRECT INTERELECTRODE CAPACITANCES

	Shielded <sup>3</sup>	Unshielded
Plate Input (Each Section).....	3.8	3.7 $\mu\text{f}$
Plate to Plate.....	3.8	1.3 $\mu\text{f}$ Max.

### MAXIMUM RATINGS (Design Maximum Values)<sup>2</sup>

Diode Current for Continuous Operation (Each Plate).....	5.0 Ma
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### CHARACTERISTICS

Voltage Drop at $I_b = 20$ Ma (Each Plate) <sup>4</sup> .....	5.0 Volts
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### NOTES:

1. 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.
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. Shield No. 316 connected to Pin 6.
4. Test condition only.

## APPLICATION

The Sylvania Type 2EN5 is a miniature double diode well suited for phase comparator applications. The 2EN5 features controlled heater warm-up time and is intended for use in television receivers employing a 450 Ma series heater string.