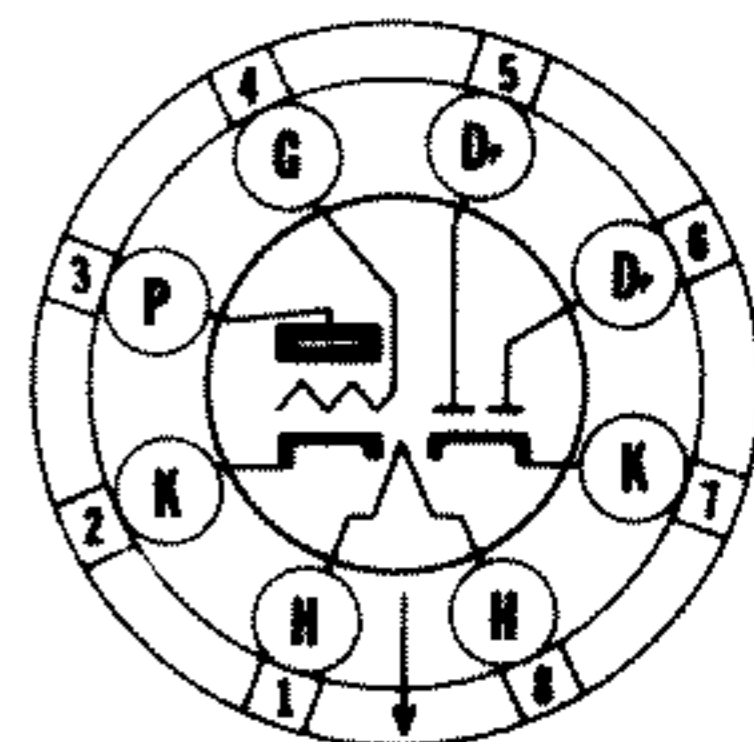
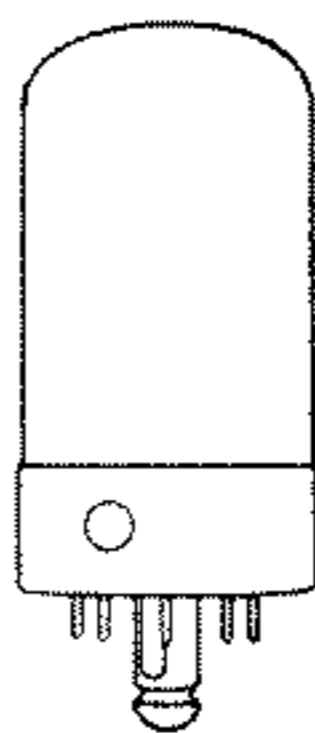


# 7K7 Sylvania Type

## DUODIODE HIGH-MU TRIODE

(Separate Diode Cathode)



8BF-L-7

### PHYSICAL SPECIFICATIONS

Base.....	Lock-In 8 Pin
Bulb.....	T-9
Maximum Overall Length.....	2 <sup>25</sup> / <sub>32</sub> "
Maximum Seated Height.....	2 1/4"
Mounting Position.....	Any

### RATINGS

Heater Voltage AC or DC (Nominal).....	7.0 Volts
Heater Current (Nominal).....	0.32 Ampere
Maximum Plate Voltage.....	300 Volts
Maximum Diode Drop for 1.5 Ma. (Per Diode).....	10 Volts
Maximum Heater-Cathode Voltage.....	90 Volts
Maximum Plate Dissipation.....	1 Watt
Minimum External Grid Bias.....	0 Volt

#### Direct Interelectrode Capacitances:\*

Grid to Plate.....	1.7 $\mu$ f.
Input.....	2.4 $\mu$ f.
Output.....	2.0 $\mu$ f.
Diode 1 to Grid 1.....	0.25 $\mu$ f. Max.
Diode 2 to Grid 1.....	0.25 $\mu$ f. Max.
Diode Cathode to Diode 1.....	2.0 $\mu$ f. Max.
Diode Cathode to Diode 2.....	2.0 $\mu$ f. Max.

\*With 1<sup>5</sup>/<sub>16</sub>" diameter shield (RMA Std. M8-308) connected to cathode.

### TYPICAL OPERATION AS AMPLIFIER—CLASS A

Heater Voltage AC or DC.....	6.3 Volts
Heater Current.....	0.3 Ampere
Plate Voltage.....	250 Volts
Grid Voltage.....	-2.0 Volts
Amplification Factor.....	70
Plate Resistance (Approximate).....	41000 Ohms
Mutual Conductance.....	1600 $\mu$ mhos
Plate Current.....	2.3 Ma.

### APPLICATION

Sylvania Type 7K7 is a duodiode high-mu triode which differs from the usual diode triode by having separate cathodes for the diode and triode sections. This permits greater flexibility in circuit design. The characteristics of the triode section are identical to those of one section of Type 7F7. Reference should be made to that type for curves, and resistance coupled amplifier data appears under Type 7F7 on page 53.