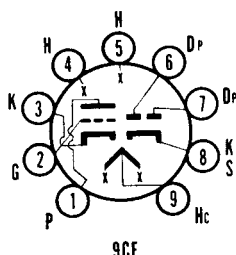




# SYLVANIA TYPE 12BR7

## DUO DIODE TRIODE



### MECHANICAL DATA

Bulb.....	T-6 $\frac{1}{2}$
Base.....	E9-1, Small Button 9-Pin
Outline.....	6-2
Basing.....	9CF
Cathode.....	Coated Unipotential
Mounting Position.....	Any

### ELECTRICAL DATA

#### HEATER CHARACTERISTICS

Heater Voltage Series/Parallel.....	12.6/6.3 Volts
Heater Current.....	225/450 Ma
Heater-Cathode Voltage (Design Center Values)	
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 (Shielded)<sup>1</sup>

Triode Grid to Plate.....	1.9 $\mu\mu\text{f}$
Triode Input.....	2.8 $\mu\mu\text{f}$
Triode Output.....	1.0 $\mu\mu\text{f}$
Diode Input (Each Diode).....	2.0 $\mu\mu\text{f}$

#### RATINGS (Design Center Values)

Plate Voltage (Triode).....	300 Volts Max.
Plate Dissipation (Triode).....	2.5 Watts Max.
Peak Inverse Diode Voltage.....	300 Volts Max.
Peak Diode Current.....	60 Ma Max.

#### CHARACTERISTICS AND TYPICAL OPERATION

##### Class A<sup>1</sup> Amplifier

Plate Voltage.....	100	250 Volts
Cathode Bias Resistor.....	270	200 Ohms
Amplification Factor.....	60	60
Plate Resistance (approx.).....	15,000	10,900 Ohms
Transconductance.....	4000	5500 $\mu\text{mhos}$
Plate Current.....	3.7	10 Ma
Grid Voltage (approx.) for $i_b = 10 \mu\text{a}$ .....	-5	-12 Volts
Average Diode Current, Each Diode with 5.0 Volts D C Applied.....		17 Ma

#### NOTE:

1. Shield No. 315.

### APPLICATION

The Sylvania Type 12BR7 is a miniature high mu triode duo diode intended for application in monochrome and color television receivers.