MECHANICAL DATA

Bulb ........................................... T-6 ½
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 DC and Peak ................................ 200 Volts Max.
Heater Positive with Respect to Cathode
DC .................................................. 100 Volts Max.
Total DC and Peak ................................ 200 Volts Max.

DIRECT INTERELECTRODE CAPACITANCES (Shielded)^1

Triode Grid to Plate .............................. 1.9 µF
Triode Input ...................................... 2.8 µF
Triode Output ................................... 1.0 µF
Diode Input (Each Diode) ...................... 2.0 µF

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, Amplifier

Plate Voltage .................................... 100 250 Volts
Cathode Bias Resistor ......................... 270 200 Ohms
Amplification Factor ............................ 60 60
Plate Resistance (approx.) ...................... 15000 10900 Ohms
Transconductance ............................... 4000 5500 µmhos
Plate Current .................................. 3.7 10 Ma
Grid Voltage (Approx.) for
I_b = 10 µA ...................................... −5 −12 Volts
Average Diode Current, Each Diode
with 5.0 Volts DC Applied ................. 17 Ma

NOTE:

1. Shield No. 315

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

CURRENTS IN MA

PLATE VOLTAGE

E' = RATED VALUE
AVERAGE PLATE CHARACTERISTICS
AVERAGE TRANSFER CHARACTERISTICS

Grid Voltage vs. Amplification Factor

- $E_f = $ Rated Value
- $E_b = 250$ Volts

Amplification Factor (μ) vs. Transconductance (gm) in Micromhos
AVERAGE TRANSFER CHARACTERISTICS

GRID VOLTAGE

PLATE RESISTANCE (r_p) IN KILOHMS

CURRENT IN MA

E_f = RATED VALUE

E_b = 250 VOLTS

r_p 200
150 100
50 10
5

-10 -8 -6 -4 -2 0
AVERAGE PLATE CHARACTERISTICS

\[ E_f = \text{RATED VALUE} \]

CURRENT IN MA

PLATE VOLTAGE

0  2  4  6  8  10