MECHANICAL DATA

Bulb ........................................ T-6½
Base ........................................ E9-1, Small Button, 9 Pin
Basing ........................................ 9CZ
Cathode ...................................... Coated Unipotential
Mounting Position
  Preferred ................................ Upright or with Plate
  Permissible ................................ Majors in Vertical Position

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage, ±5% (Series/Parallel) ........ 12.6/6.3 Volts
Heater Current (Series/Parallel) ............. 300/600 Ma
Heater Power (Series/Parallel) ............... 3.8/3.8 Watts
Heater Cathode Voltage
  Heater Negative with Respect to Cathode:
    Total DC and Peak .......................... 200 Volts Max.
  Heater Positive with Respect to Cathode: ¹
    DC ........................................ 100 Volts Max.
    Total DC and Peak .......................... 200 Volts Max.

DIRECT INTERELECTRODE CAPACITANCES (Each Section)

Grid to Plate .................................. 3.2 µpf
Input .......................................... 3.6 µpf
Output ........................................ 0.6 µpf
Grid to Grid ................................... 0.042 µpf Max.
Plate to Plate .................................. 1.0 µpf Max.
Heater to Cathode .............................. 4.6 µpf

RATINGS (Design Center Values — Except as Noted)

Plate Voltage ................................ 300 Volts Max.
Peak Positive Plate Voltage² (Abs. Max.) .... 1000 Volts
Negative Grid Voltage ......................... 75 Volts Max.
Positive Grid Voltage .......................... 3.5 Volts Max.
Peak Negative Grid Voltage .................... 400 Volts Max.
Peak Positive Grid Voltage² ................. 13 Volts Max.
Average Positive Grid Current ............... 5 Ma Max.
Peak Positive Grid Current² ................. 100 Ma Max.
Average Cathode Current ....................... 25 Ma Max.
Peak Cathode Current² ....................... 300 Ma Max.
Plate Dissipation
  Each Plate .................................. 3.5 Watts Max.
  Both Plates ................................ 7.0 Watts Max.
Bulb Temperature .............................. 120°C Max.
Grid Circuit Resistance
  Fixed Bias .................................. 0.1 Megohm Max.
  Cathode Bias .............................. 0.5 Megohm Max.

QUICK REFERENCE DATA

The Sylvania Type 6350 is a miniature, T-6½, twin triode designed for use in high speed digital computers. Each section of the 6350 features a high zero bias plate current, sharp cutoff and a separate cathode connection.
CHARACTERISTICS (Each Section) \(^3\)

Conditions:
- Plate Voltage ....................... 150 Volts
- Grid Voltage ....................... -5.0 Volts
- Plate Current ....................... 11 Ma
- Transconductance ................... 4600 \(\mu\)mhos
- Amplification Factor ................ 18
- Plate Resistance .................... 3900 Ohms
- Grid Voltage for \(I_b=100\ \mu\)a \(^4\) ................... -11 Volts
- Grid Voltage for \(I_b=1.0\ \)ma \(^5\) ................... -12 Volts

Interelectrode Resistance, Each Section \(^6\)
- Plate to All (Min.) .................. 50 Megohms
- Grid to All (Min.) .................. 50 Megohms

Time Dependent Characteristics
- Minimum Number of Heater Cycles .................. 2000
- Regulation of Heater Supply (Max.) .................. 4%
- Heater Voltage (AC) .................. 7.0 Volts
- Heater Cathode Voltage (AC) .................. 140 Volts

NOTES:
1. Heater positive is not recommended for reliable operation.
2. At 8% duty cycle, 1 megacycle repetition rate.
3. Section not under test shall be grounded.
4. With plate voltage of 150 volts.
5. With plate voltage of 200 volts.
6. With applied dc voltage of 300 volts and heater voltage of 6.3 volts. Cathode Positive so that no cathode emission occurs.
AVERAGE PLATE CHARACTERISTICS
EACH SECTION

Ef = 6.3 VOLTS

CURRENTS IN MILLIAMPERES

PLATE VOLTAGE
AVERAGE CHARACTERISTICS

\[ E_f = 6.3 \text{ VOLTS} \]