Sylvania Type 12AJ6

**Mechanical Data**
- Bulb: T-5½
- Base: E7-1, Miniature Button 7-Pin
- Outline: 6-2
- Basing: 7BT
- Cathode: Coated Unipotential
- Mounting Position: Any

**Electrical Data**

**Heater Characteristics**
- Heater Voltage: 12.6 Volts
- Heater Current: 150 Ma
- Heater-Cathode Voltage (Design-Center Values): 30 Volts Max.
- Heater Negative with Respect to Cathode: 30 Volts Max.
- Heater Positive with Respect to Cathode: 30 Volts Max.

**Direct Inter-electrode Capacitances (Unshielded)**
- Grid to Plate: 2.0 μF
- Input: g to (h + k): 2.2 μF
- Output: p to (h + k): 0.8 μF
- Diode to Diode: 0.9 μF

**Ratings (Design-Center Values)**
- Plate Voltage: 30 Volts Max.
- Cathode Current: 20 Ma Max.
- Grid Circuit Resistance: 10 Megohms Max.
- Average Diode Current: 1.0 Ma Max.

**Characteristics and Typical Operation**

**Class A, Amplifier**
- Plate Voltage: 12.6 Volts
- Grid Voltage: 0 Volts
- Plate Current: 750 μA
- Transconductance: 1200 μmhos
- Amplification Factor: 55
- Plate Resistance: 45,000 Ohms
- Average Diode Current with 10 Volts Applied (Each Diode): 2.0 Ma

**Resistance Coupled Amplifier**
- Plate Supply Voltage: 12.6 Volts
- Grid Voltage: 1.0 Megohm
- Grid Resistor: 1.0 Megohm
- Plate Load Resistor: 0.02 μF
- Input Capacitor: 0.01 μF
- Output Capacitor: 2.0 Megohms
- Grid Resistor of Following Stage: 16
- Voltage Gain at 400 CPS:

**Notes:**
1. This tube is intended for use in automobile radios operated from a nominal 12 volt battery. Design of the tube is such that the heater will operate satisfactorily over the range 10.0 volts to 15.9 volts, and that the maximum ratings provide a safety factor for the wide voltage variation encountered with this type of supply.
2. Test condition only.
3. Average contact potential developed across specified grid resistor.
4. Measured at an output voltage of 1.0 volt RMS.

**Application Notes**
The Sylvania Type 12AJ6 is a miniature double diode, high-mu triode intended for use as a second detector audio amplifier. It is designed for operation where the heater and plate voltages are supplied directly from a 12-volt automotive storage battery.