The Type 6287 is a miniature audio beam-power pentode characterized by long life and stable performance. It is suitable for service where severe conditions of mechanical shock and vibration are encountered.

--- MECHANICAL DATA ---

**GENERAL**

- **Style**: miniature
- **Cathode**: coated unipotential
- **Bulb**: 1-6 1/2
- **Base**: 9 pin E9-1, miniature button
- **Basing**: 9CT
- **Connections**:
  - Pin 1 - cathode
  - Pin 2 - grid #2
  - Pin 3 - plate
  - Pin 4 - heater
  - Pin 5 - heater
  - Pin 6 - plate

**Outline**: 5-4
**Maximum Diameter**: 0.875 inch
**Maximum Overall Bulb Length**: 2.470 inches

**Mounting Position**: any

**RATINGS(1)**

- **Maximum Impact Acceleration**: 450 g
- **Maximum Uniform Acceleration**: 1,000 g
- **Maximum Vibrational Acceleration**: 2.5 g
- **Maximum Bulb Temperature**: 300 °C

--- ELECTRICAL DATA ---

**GENERAL**

- **Heater Voltage (ac or dc)**: 6.3 volts
- **Heater Current**: 600 mA

**Life Expectancy**:
- 200 °C Ambient Temperature... 1,000 hours
- 30 °C Ambient Temperature... 5,000 hours

**Direct Inter electrode Capacitances**:
- Grid #1 to Plate(max.): 1.1 μf
- Input: 8.0 μf
- Output: 9.0 μf

**RATINGS(1)-Absolute Values**

- **Heater Voltage (ac or dc)**: 6.3 ±(±5%) volts
- **Maximum Plate Voltage**: 275 volts
- **Maximum Grid #2 Voltage**: 275 volts
- **Maximum Plate Dissipation**: 13.2 watts
- **Maximum Grid #2 Dissipation**: 3.2 watts
- **Maximum Cathode Current**: 65 mA
- **Maximum Negative Grid #1 Voltage**: 110 volts
- **Maximum Heater-Cathode Voltage**: ±200 volts

**CONDITIONS**

- **Heater Voltage**: 6.3 volts
- **Plate Voltage**: 250 volts
- **Grid #2 Voltage**: 250 volts
- **Grid #1 Voltage**: -12.5 volts
- **Plate Current**: 50 mA
- **Grid #2 Current**: 5.0 mA
- **Transconductance**: 1,100 μmhos
- **Plate Resistance**: 55,000 ohms

- **Grid #1 Voltage for 10 μA**
  - **Plate Current**: -60 volts

- **Noise Output Voltage**: 300 mV

**TYPICAL OPERATION**

**Audio Amplifier**

- **Heater Voltage**: 6.3 volts
- **Plate Voltage**: 250 volts
- **Grid #2 Voltage**: 250 volts
- **Grid #1 Voltage**: -12.5 volts
- **Plate Load Resistor**: 6,000 ohms
- **Grid #1 Signal Voltage**: 8.8 volts
- **Plate Current**: 48 mA
- **Grid #2 Current**: 10.5 mA
- **Power Output**: 4.5 watts
- **Total Harmonic Distortion**: 9.0 %

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(See page 2 for Notes)

from RTMA release #1203, June 12, 1953

5/5/53
SYLVANIA ELECTRIC PRODUCTS INC.
1740 Broadway New York 19, New York

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(1) Limitations beyond which normal tube performance and tube life may be impaired.

(2) Forces in any direction as applied by the Navy Type High Impact (Flyweight) Shock Machine for Electronic Devices, or equivalent.

(3) Forces in any direction applied gradually, as in centrifuge.

(4) Vibrational forces in any direction at 60 cycles per second for a period exceeding 100 hours.

(5) Tube life and reliability of performance are directly related to the degree of regulation of the heater voltage to its center-rated value of 6.3 volts.

(6) Across plate resistor of 2,000 ohms, with applied vibrational acceleration of 2.5 g at 25 cycles per second.