

SYLVANIA ELECTRIC

RMA Registration Data

TYPE 5901

PENTODE

The Type 5901 is a subminiature semi-remote cutoff rf pentode capable of operation in the uhf region. This type is characterized by long life and stable performance. It is designed for service where severe conditions of mechanical shock and vibration are encountered, and it is suitable for high operating temperatures.

MECHANICAL DATA

GENERAL

Style	subminiature
Cathode	coated, unipotential
Bulb	T-3
Base	K8-1, (1) Subminiature Button-- Flexible Leads
Outline	3-1
Maximum Bulb Diameter	0.400 inch
Maximum Overall Bulb Length	1.375 inches
Minimum Lead Length	1.500 inches
Mounting Position	any
Basing	8DL
<i>Lead Connections:</i>	
Lead 1 .. grid #1	Lead 5 .. plate
Lead 2 .. cathode and grid #3	Lead 6 .. heater
Lead 3 .. heater	Lead 7 .. grid #2
Lead 4 .. cathode and grid #3	Lead 8 .. cathode and grid #3

RATINGS(2)

Maximum Impact Acceleration(3)	450 G
Maximum Uniform Acceleration (4)	1,000 G
Maximum Vibrational Acceleration for Extended Periods(5)	2.5 G

ELECTRICAL DATA

GENERAL

<i>Direct Interelectrode Capacitances: (6)</i>	
Grid to Plate, maximum	0.015 μ f
Input	4.20 μ f
Output	4.00 μ f
Heater Voltage (ac or dc)	6.3 volts
Heater Current	150 milliamps

RATINGS(5) -- Absolute System

Heater Voltage (ac or dc)(7)	6.3 (\pm 10%) volts
Maximum Plate Voltage (dc)	165 volts
Maximum Grid #2 Voltage (dc)	155 volts
Maximum Plate Dissipation	1.10 watts
Maximum Grid #2 Dissipation	0.55 watts
Maximum Heater-Cathode Voltage	\pm 200 volts

(See Page 2 for all notes.)

TYPE 5901

CHARACTERISTICS

Conditions:

Heater Voltage (ac or dc)	6.3	volts
Plate Voltage (dc)	100	volts
Grid #2 Voltage (dc)	100	volts
Cathode Resistor	150	ohms
Plate Current	7.5	milliamps
Grid #2 Current	2.4	milliamps
Transconductance	5,000	micromhos
Plate Resistance	230,000	ohms
Grid #1 Voltage for 10 μ amps Plate Current	-9.0	volts
Noise Output Voltage, maximum ⁽⁸⁾	100	millivolts
Life Expectancy, at 180 °C Maximum Bulb Temperature	5,000	hours
Life Expectancy, at 250 °C Maximum Bulb Temperature	1,500	hours

- (1) *With 1.500 inches Minimum Lead Length as specified above.*
- (2) *Limitations beyond which normal tube performance and tube life may be impaired.*
- (3) *Forces in any direction as applied by the NRL Impact Machine for Electronic Devices, or equivalent.*
- (4) *Forces in any direction applied gradually, as in centrifuge.*
- (5) *Vibrational forces in any direction at 60 cycles per second for a period exceeding 100 hours.*
- (6) *External shield of 0.405 inch diameter connected to cathode.*
- (7) *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.*
- (8) *Across plate resistor of 10,000 ohms, with applied vibrational acceleration of 15 G.*