

# SYLVANIA ELECTRIC

## RTMA Registration Data

from RTMA release #946,  
Feb. 20, 1951

### TYPE 6056

#### PENTODE

The Type 6056 is a subminiature remote-cut off 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.

#### 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  
Lead Connections:  
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

Direct Interelectrode Capacitances:(6)  
Grid #1 to plate, maximum ..... 0.015  $\mu$ f  
Input ..... 4.40  $\mu$ f  
Output ..... 3.4  $\mu$ f  
Heater Voltage (ac or dc) ..... 26.5 volts  
Heater Current ..... 45 milliamps

##### RATINGS(2) -- Absolute System

Heater Voltage (ac or dc)(7) ..... 26.5 ( $\pm$ 5%) volts  
Maximum Plate Voltage (dc) ..... 55 volts  
Maximum Grid #2 Voltage (dc) ..... 55 volts  
Maximum Cathode Current (dc) ..... 10 milliamps  
Maximum Heater-Cathode Voltage .....  $\pm$ 200 volts

(See Page 2 for notes.)

**TYPE 6056**

CHARACTERISTICS

Conditions:

Heater Voltage (ac or dc) .....	26.5	volts
Plate Voltage (dc) .....	26.5	volts
Grid #2 Voltage (dc) .....	26.5	volts
Grid #1 Resistor .....	2.2	megohms
Plate Current .....	2.7	milliamps
Grid #2 Current .....	1.1	milliamps
Transconductance .....	3,000	micromhos
Plate Resistance .....	125,000	ohms
Grid #1 Voltage for 10 $\mu$ mhos		
Transconductance .....	-4.5	volts
Noise Output Voltage, maximum <sup>(8)</sup> .....	100	millivolts
Life Expectancy, at 160 °C Maximum Bulb		
Temperature .....	5,000	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 Navy Type High Impact (Flyweight) Shock 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) With 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 26.5 volts.
- (8) Across plate resistor of 10,000 ohms, with applied vibrational acceleration of 15 g at 40 cycles per second.