

# SYLVANIA ELECTRIC

## RMA Registration Data

### TYPE 5638

#### PENTODE VOLTAGE AMPLIFIER

#### MECHANICAL DATA

Style .....	subminiature
Cathode .....	coated, unipotential
Outline .....	(see Page 2)
Maximum Diameter .....	0.400 inch
Maximum Bulb Length .....	1.500 inches
Bulb .....	T-3
Base .....	subminiature button, flexible leads (see Page 2)
 Lead Connections:	
Lead 1 .. plate	Lead 4 .. heater
Lead 2 .. cathode and grid #3	Lead 5 .. grid #2
Lead 3 .. grid #1	Lead 6 .. heater
 Mounting Position .....	any
Maximum Acceleration <sup>(1)</sup> .....	1,000 G

#### ELECTRICAL DATA

##### GENERAL

##### Direct Interelectrode Capacitances

	<u>without shield</u>	<u>with shield</u> <sup>(2)</sup>
Grid to Plate .....	0.22	0.19 $\mu\mu\text{f}$
Input .....	4.00	4.00 $\mu\mu\text{f}$
Output .....	3.00	6.50 $\mu\mu\text{f}$

Heater Voltage .....	6.3 volts
Heater Current .....	150 milliamps

##### RATINGS - - Design Center Values

Heater Voltage (ac or dc) .....	6.3 ( $\pm 10\%$ )	volts
Maximum Plate Voltage .....	150	volts
Maximum Screen Voltage .....	140	volts
Maximum Plate Dissipation .....	0.6	watt
Maximum Screen Dissipation .....	0.2	watt
Maximum Heater to Cathode Voltage .....	90	volts
Maximum Grid Circuit Resistance (self bias) ...	1	megohm

(1) Forces applied gradually, as in centrifuge, in direction of long axis of tube and such that internal structure is in tension.

(2) External shield of 0.405 inch diameter connected to cathode.

**TYPE 5638**

CHARACTERISTICS

Heater Voltage .....	6.3	volts
Plate Voltage (dc) .....	100	volts
Screen Voltage (dc) .....	100	volts
Self Bias Resistor .....	270	ohms
Plate Current .....	4.8	milliamps
Screen Current .....	1.25	milliamps
Transconductance .....	3,300	$\mu$ hos
Plate Resistance .....	150,000	ohms
Grid Bias for 10 $\mu$ amps Plate Current .....	-9.0	volts

