

### MECHANICAL DATA

Maximum Overall Length . . . . .	2.38 Inches
Maximum Overall Diameter . . . . .	1.01 Inches

### ELECTRICAL DATA

#### DIRECT INTERELECTRODE CAPACITANCES

Grid to Plate . . . . .	1.90 $\mu\text{mf}$
Grid to Cathode . . . . .	1.20 $\mu\text{mf}$
Plate to Cathode . . . . .	0.38 $\mu\text{mf}$

#### RATINGS

Heater Voltage (a c or d c) . . . . .	6.3 Volts
Heater Current . . . . .	400 Ma
Maximum Plate Dissipation . . . . .	5.0 Watts
Maximum Seal Temperature . . . . .	175° C
Maximum Plate Voltage (Pulsed) . . . . .	1500 Volts
Maximum Operating Frequency . . . . .	5000 Mc

#### CHARACTERISTICS

Conditions: ( $E_b = 180$  volts d c,  $R_k = 400$  ohms)

Transconductance . . . . .	4500 $\mu\text{mhos}$
Amplification Factor . . . . .	25
Plate Current . . . . .	12.0 Ma

#### TYPICAL OPERATING CONDITIONS

##### UHF Oscillator — Plate Pulse Modulated

	1000 Mc <sup>1</sup>	2000 Mc <sup>2</sup>	3000 Mc <sup>2</sup>	4000 Mc <sup>2</sup>	5000 Mc <sup>2</sup>
Heater Voltage . . . . .	6.3	6.3	6.3	6.3	6.3 Volts
Peak Plate Voltage . . . . .	1000	1200	1200	1200	1200 Volts
Peak Plate Current . . . . .	900	900	900	900	900 Ma
Grid Voltage . . . . .	0	0	0	0	0 Volts
Pulse Repetition Frequency . . . . .	2000	1000	1000	1000	1000 PPS
Pulse Width . . . . .	2.0	1.0	1.0	1.0	1.0 $\mu\text{sec.}$
Peak Power Output . . . . .	250	200	175	150	15-20 Watts
Grid Voltage for $I_b = 10\mu\text{a}$ . . . . .	-28	-28	-28	-28	-28 Volts

#### NOTES:

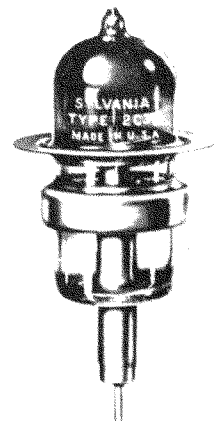
1. In Sylvania Fixed Frequency Cavity.
2. In Amerac Type 192 Tunable Cavity designed for frequency range.

#### APPLICATION DATA

The Sylvania Type 2C36 was designed for use as a pulse-modulated oscillator at frequencies up to 1750 mc. The 2C36 has a built-in internal feedback circuit between cathode and anode and fits into a concentric circuit. A small amount of adjustable, external feedback is generally necessary in order to obtain optimum power output at any given frequency. A feedback probe between the output and input lines may be used. With plate-pulse modulation the grid may be operated at zero bias, eliminating the necessity of insulating the cathode from the grid in the input-line plunger.

### QUICK REFERENCE DATA

The Sylvania Type 2C36 is a UHF triode oscillator designed for service at frequencies up to 1750 mc. Operation with good power at frequencies with up to 5000 mc. is possible with the Amerac Type 192 Cavity.



**SYLVANIA ELECTRIC  
PRODUCTS INC.**

**ELECTRONICS DIVISION  
WOBBURN, MASS.**

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OUTLINE DRAWING

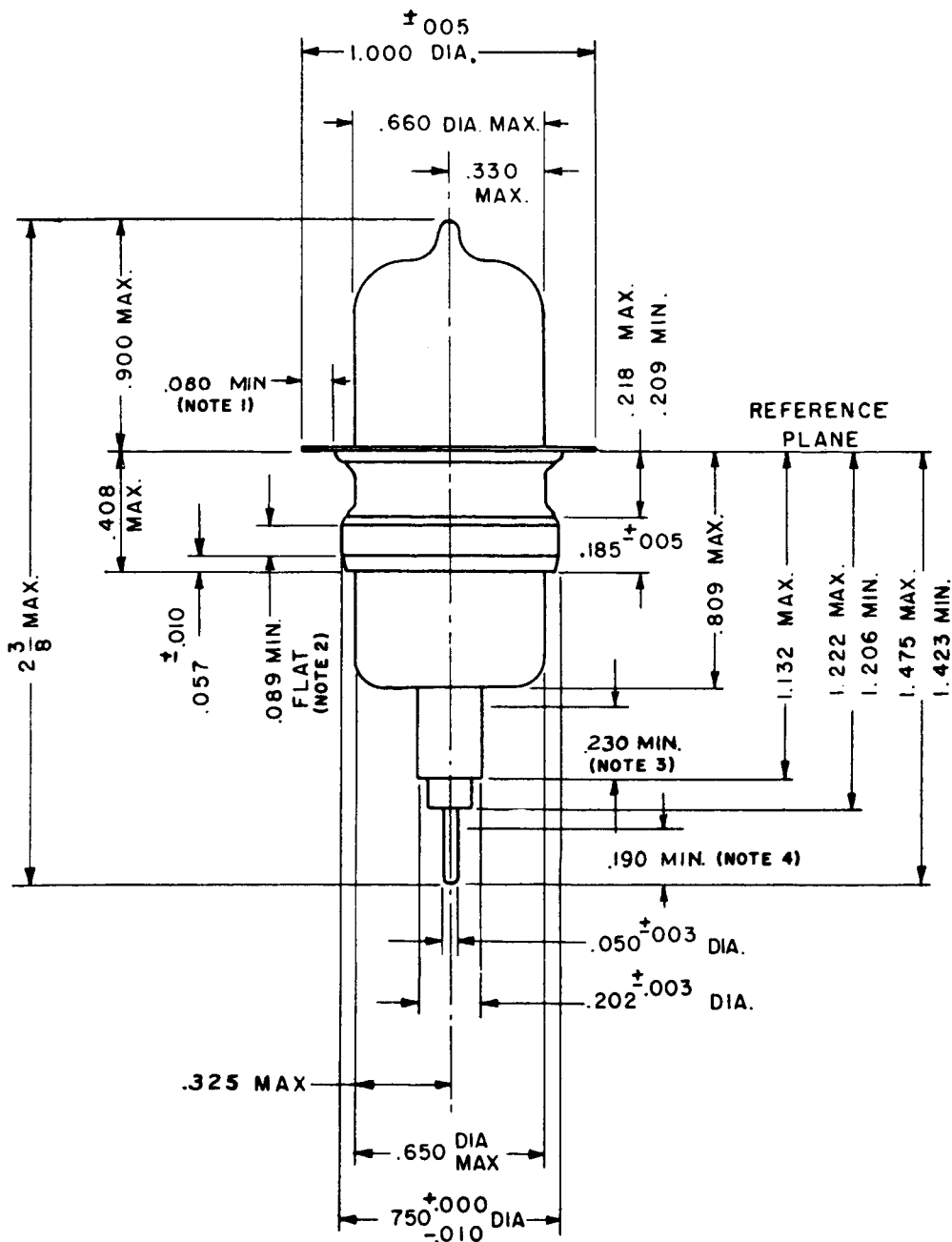


DIAGRAM NOTES:

1. Plate contact area.
2. Grid contact area.
3. Cathode and filament contact area.
4. Filament contact area.