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2C36

MECHANICAL DATA

Maximum Overall Length	2.38 Inches
Maximum Overall Diameter	1.01 Inches

ELECTRICAL DATA

DIRECT INTERELECTRODE CAPACITANCES

Grid to Plate	1.90 $\mu\mu$f
Grid to Cathode	1.20 $\mu\mu$f
Plate to Cathode	0.38 $\mu\mu$f

RATINGS

Heater Voltage (ac or dc)	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 dc, R_k = 400 ohms)

Transconductance	4500 μmhos
Amplification Factor	25
Plate Current	12.0 Ma

TYPICAL OPERATING CONDITIONS

UHF Oscillator — Plate Pulse Modulated

	1000 Mc[1]	2000 Mc[2]	3000 Mc[2]	4000 Mc[2]	5000 Mc[2]	
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	μsec.
Peak Power Output	250	200	175	150	15-20	Watts
Grid Voltage for I_b = 10μa	−28	−28	−28	−28	−28	Volts

NOTES:

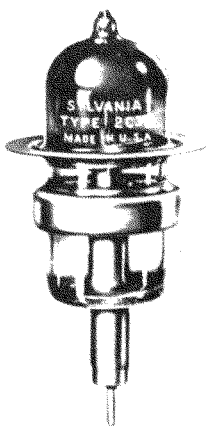
1. *In Sylvania Fixed Frequency Cavity.*
2. *In Amerac Type 192 Tunable Cavity designed for frequency range.*

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.



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OUTLINE DRAWING

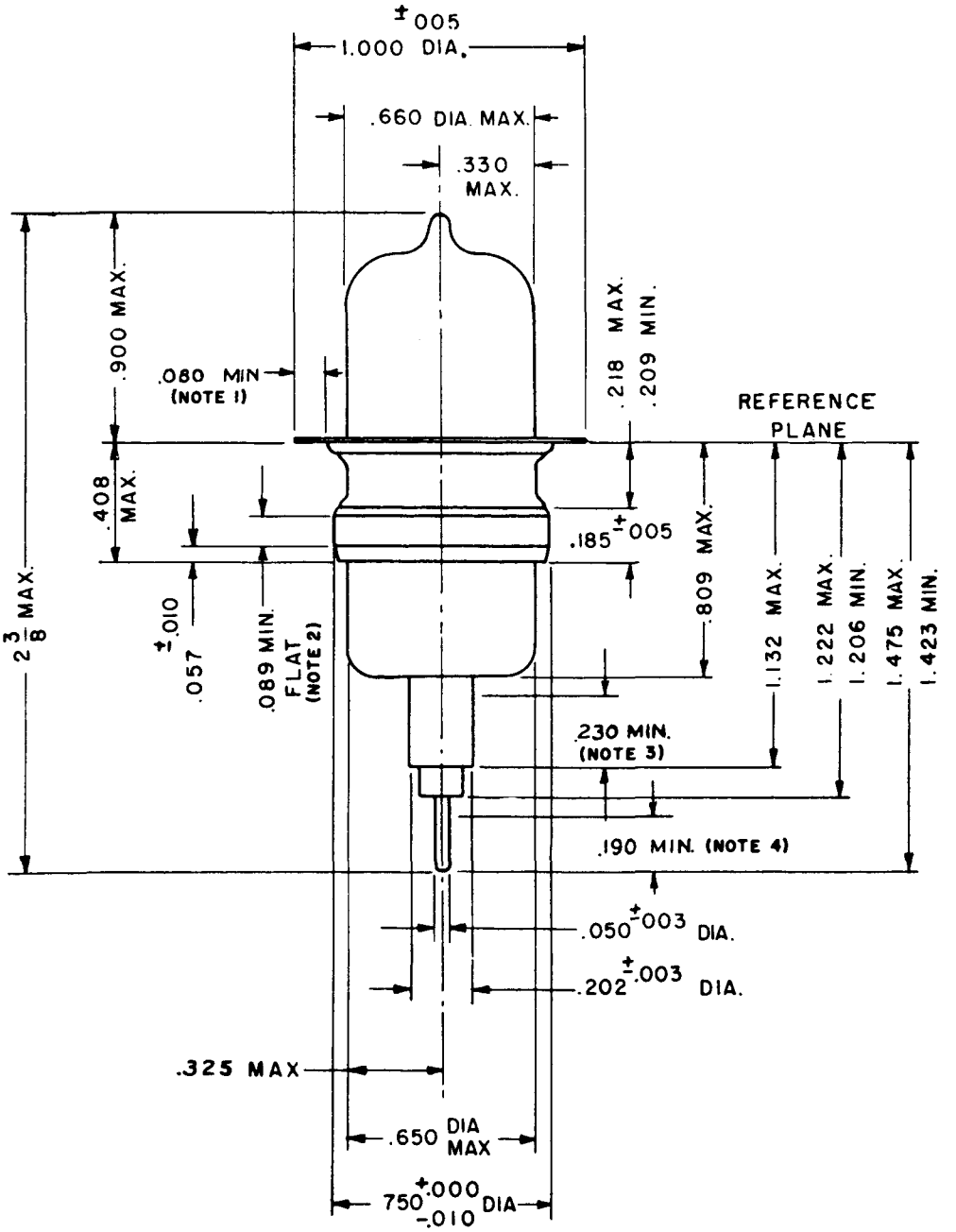

DIAGRAM NOTES:

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