



engineering data service

SYLVANIA

RT434

MECHANICAL DATA

Maximum Overall Length	2 $\frac{3}{8}$ Inches
Maximum Overall Diameter	.812 Inches

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage	6.3 Volts
Heater Current	400 Ma

DIRECT INTERELECTRODE CAPACITANCES (Average)

Grid to Plate	1.45 μmf
Grid to Cathode	1.35 μmf
Plate to Cathode	.040 μmf

RATINGS (Absolute Values)

Heater Voltage (AC or DC)	6.3 Volts
Heater Current	400 Ma
Plate Dissipation	5 Watts Max.
Plate Voltage	350 Volts Max.
Operating Frequency	3300 Mc Max.
Seal Temperature	175° C Max.

CHARACTERISTICS

Conditions ($E_b=180$ volts dc, $R_k=400$ ohms)	
Transconductance	4230 μmhos
Amplification Factor	25
Plate Current	16.5 Ma

TYPICAL OPERATING CONDITIONS

UHF CW Oscillator — 1000 MC

Plate Voltage	80 Volts
Plate Current	16.5 Ma
Grid Resistor	1000 Ohms
Power Output	500 MW

UHF CW Oscillator — 3300 MC

Plate Voltage	200 Volts dc
Plate Current	24 Ma dc
Cathode Resistor	Adjust for Plate Current
Power Output	200 MW

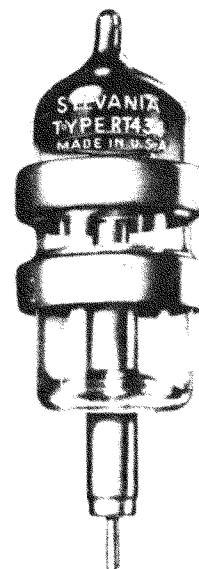
APPLICATION DATA

Sylvania Type RT 434 was designed primarily for use in microwave circuits as a CW Oscillator at frequencies up to 3300 MC. This planar-electrode, disc-seal triode may be used as an integral part of a tuned cavity. Its low internal lead inductance makes this tube well adapted to lumped-constant circuits. The mechanical configuration was designed for use in butterfly type circuits.

Frequency ratios of about 4 to 1 (250 MC to 1000 MC) for continuous tuning can be obtained up to 1000 MC with no dead spots throughout the range. Ratios of about 3 to 1 can likewise be obtained up to 3300 MC.

QUICK REFERENCE DATA

The Sylvania Type RT 434 is a general purpose medium mu triode intended primarily for service in microwave circuits as a cw oscillator at frequencies up to 3300 mc.



SYLVANIA ELECTRIC
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ELECTRONICS DIVISION
WOBURN, MASS.

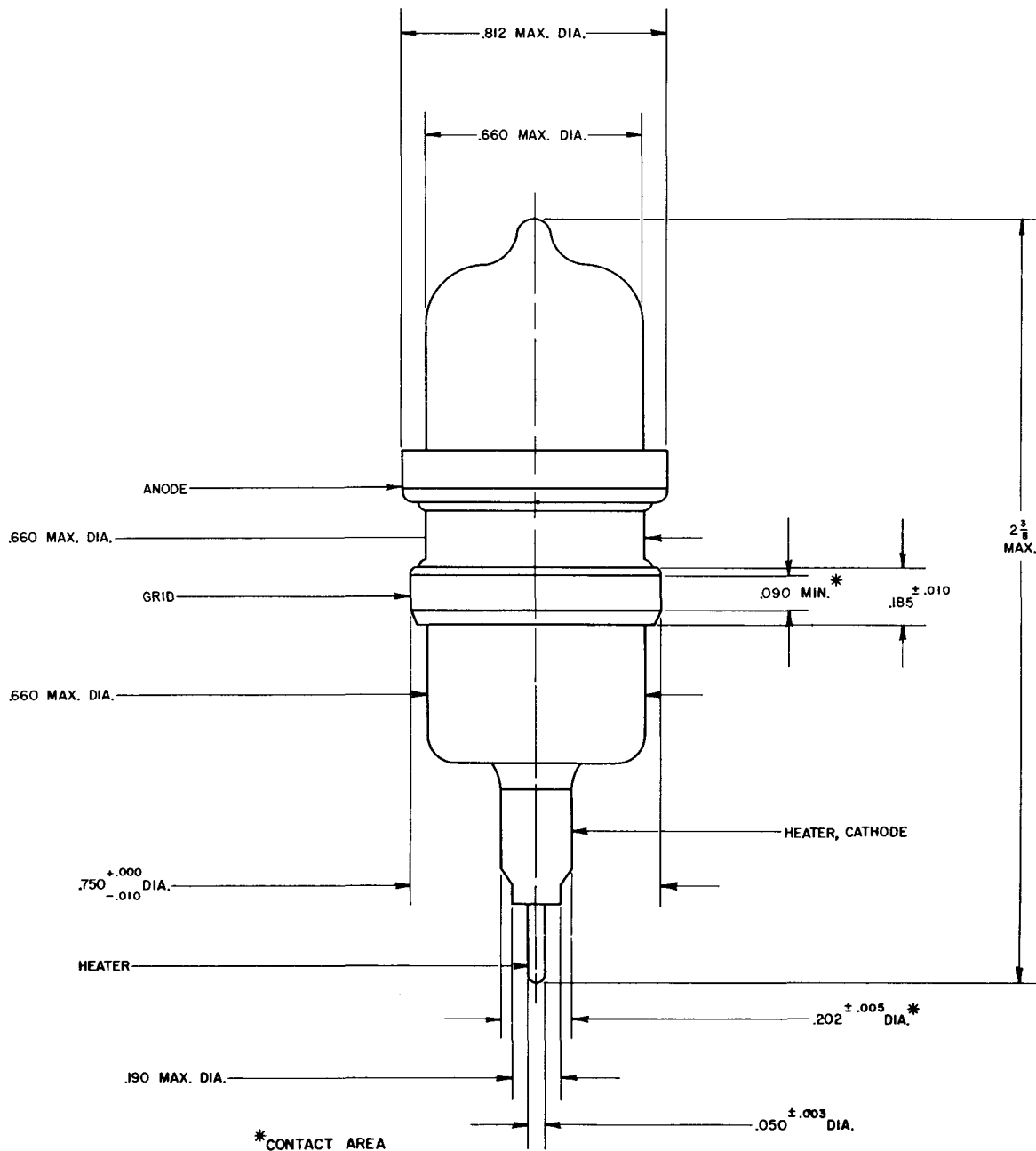
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SYLVANIA RT434

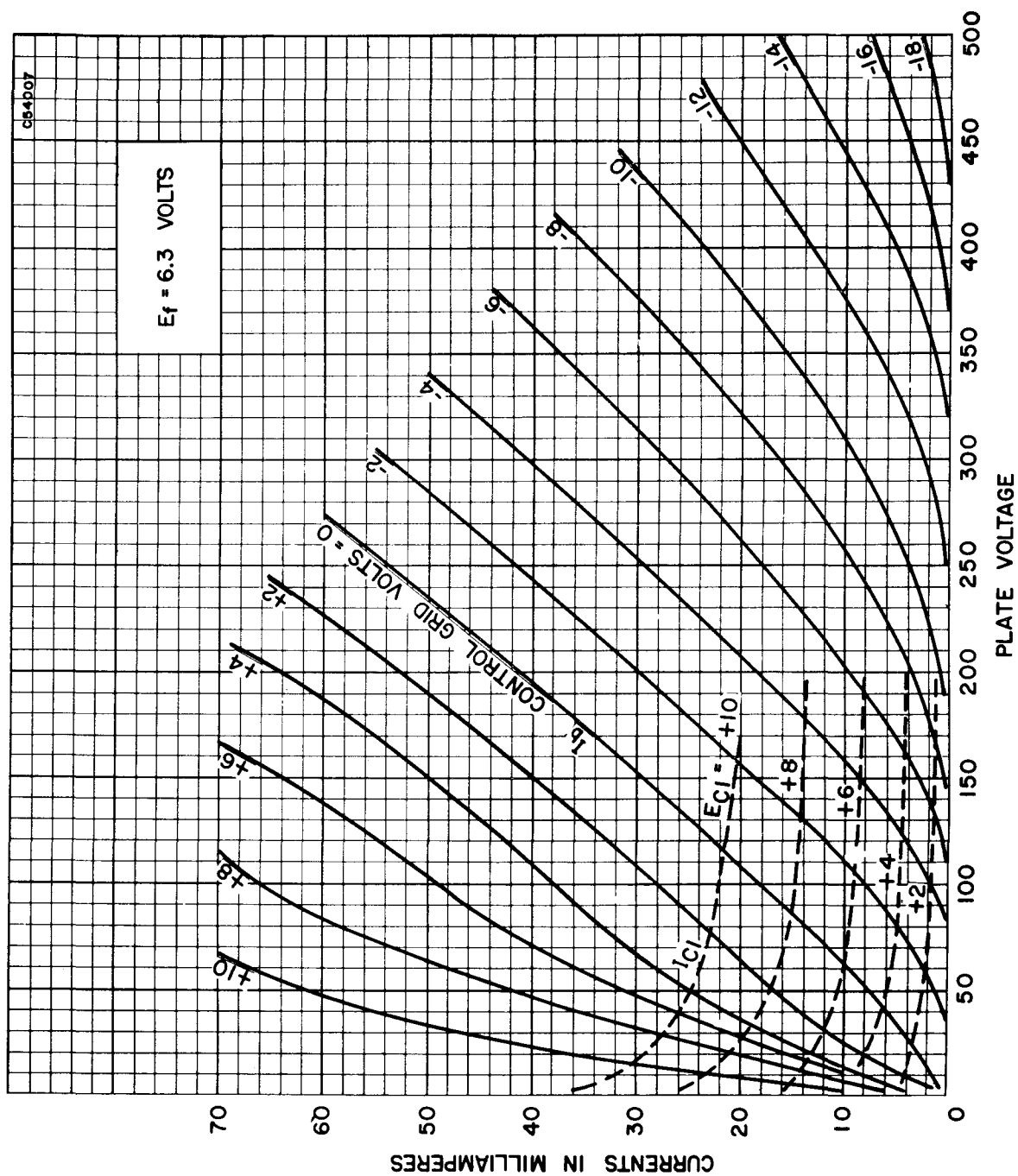
APPLICATION DATA CONT'D

The Sylvania Planar Type construction features a non-buckling, stretched, parallel-wire grid that results in stable, uniform operation; a unique cathode designed to minimize discontinuities in the cathode structure; and, a disc-seal construction that satisfies the requirements for low lead inductance.

OUTLINE DRAWING



AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS

