SYLVANIA

engineering data service

TENTATIVE DATA

SYLVANIA

6503

MECHANICAL DATA

Max. Overall Length	2 3/8 inches
Max. Diameter	1.000 inches
Grid Ring Diameter	.745 ± .005 inches

RATINGS AND CHARACTERISTICS

ELECTRICAL RATINGS

Heater Voltage (AC or DC)	6.3 Volts
Heater Current (max)	.405 amperes
Plate Voltage (max) DC	350 volts
Plate Dissipation (max)	5 watts
Seal Temperature (max)	175°C
Operating Frequency (max)	3300 megacycles
Direct Interelectrode Capacitance (max)	
Grid-plate	1.70 μμf
Grid-cathode	1.60 μμf
Plate-cathode	.030 μμf

CHARACTERISTICS (1)

Transconductance (max)	5650 micromhos
Application Factor (max)	23

TYPICAL OPERATING CONDITIONS

UHF OSCILLATOR CW

Plate Voltage	200 V dc
Plate Current	25 mA
Cathode Resistor (2)	100 ohms (approx.)
Frequency	3300 Mc
Power Output (Avg.)	450 mW

NOTES:

(1) Test Conditions

Plate Voltage	180 V dc
R_k/I_b =	12 mA

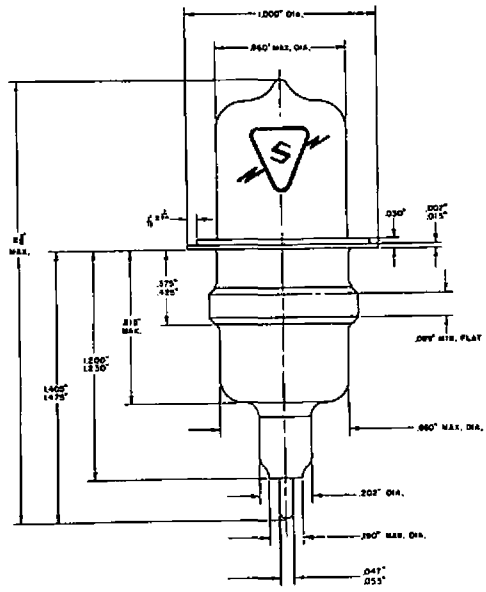
(2) Adjusted for plate current of 25 mA

APPLICATION DATA

The 6503 is designed as an CW oscillator to 3300 Mcs. It functions as an extremely stable prime signal source or local oscillator. The Amerac* 192A type cavity is recommended.

* Amerac Incorporated, Wenham, Massachusetts

from JETEC release #1416, Feb. 14, 1955

QUICK REFERENCE DATA

The Sylvania Type 6503 was designed primarily for use as a cw oscillator at frequencies up to 3300 mc. The ruggedized anode ring of the 6503 suits it for applications involving shock and vibration.