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 µpf
  Grid-cathode  
1.60 µpf
  Plate-cathode  
.030 µpf

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
  \( \frac{R_k}{I_b} = 12 \) mA
(2) Adjusted for plate current of

APPLICATION DATA

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

*Amerac Incorporated, Wenham, Massachusetts

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