THIS DATA SHEET ALSO APPLIES TO TWO OTHER MILITARY VERSIONS, DESIGNATED 5703WA AND 5703WB

TRIODE
SUBMINIATURE TYPE

FOR UHF OSCILLATOR APPLICATIONS

ANY MOUNTING POSITION

BOTTOM VIEW
0.016" TINNED FLEXIBLE LEADS
0.048" CENTER-TO-CENTER EXCEPT LEADS 1-3 = 0.096"
CENTER-TO-CENTER IN-LINE

THE 5703 IS A HEATER-CATHODE TYPE MEDIUM-MU SUBMINIATURE TRIODE CAPABLE OF OPERATION AS AN OSCILLATOR, CLASS C AMPLIFIER, OR FREQUENCY MULTIPLIER IN THE UHF REGION. THE FLEXIBLE TERMINAL LEADS MAY BE SOLDERED OR WELDED TO CIRCUIT COMPONENTS WITHOUT THE USE OF SOCKETS. STANDARD SUBMINIATURE SOCKETS MAY BE USED BY CUTTING THE LEADS TO A SUITABLE LENGTH.

DIRECT INTERELECTRODE CAPACITANCES
WITHOUT SHIELD

GRID TO PLATE 1.2 pf
INPUT 2.6 pf
OUTPUT 0.7 pf

HEATER CHARACTERISTICS AND RATINGS

AVERAGE CHARACTERISTICS 6.3 VOLTS 200 MA.

HEATER SUPPLY LIMITS:
VOLTAGE OPERATION 6.3 ± 0.6 VOLTS

MAXIMUM HEATER CATHODE VOLTAGE ±100 VOLTS

MAXIMUM RATINGS

PLATE VOLTAGE 275 VOLTS
PLATE DISSIPATION 3.3 WATTS
PLATE CURRENT 22 MA.
GRID CURRENT 5.5 MA.
ALTITUDE 10,000 FEET
ENVELOPE TEMPERATURE 220 °C

TUNG-SOL ELECTRIC INC., ELECTRON TUBE DIVISION, BLOOMFIELD, NEW JERSEY, U.S.A.
FEBRUARY 1, 1963 PLATE 6657
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**TYPICAL OPERATING CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Unit</th>
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<tbody>
<tr>
<td>DC PLATE VOLTAGE</td>
<td>120</td>
<td>VOLTS</td>
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<tr>
<td>DC GRID VOLTAGE</td>
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<tr>
<td>CATHODE BIAS RESISTANCE</td>
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<td>PLATE CURRENT</td>
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<td>MA</td>
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<td>TRANSCONDUCTANCE</td>
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<td>ΩMHO</td>
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<tr>
<td>AMPLIFICATION FACTOR</td>
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</tbody>
</table>

**SPECIAL TESTS AND RATINGS**

OPERATION PEAK OUTPUT (AC MIN.)
- Ebb = 105 Vdc; Ef = 5.2 Vcc; E9 = 19.5 Vcc; RL = 750;
- Rg = 2700; CIRCUIT DRAWING - SEE FIGURE 1

POWER OSCILLATION (MIN.)
- Ebb = 91 Vdc; Ef = 5.6 Vcc; Tg = 2400; F = 400 Mc
- TEST PER 185 JAN DRAWING OR EQUIVALENT

![Graph showing plate current vs. plate voltage](image)

- $E_f = 6.3$ Volts
$E_f = 6.3 \text{ Volts}$

$E_{C+} = +10 \text{ Volts}$

$E_{C+} = +8 \text{ Volts}$

$E_{C+} = +6 \text{ Volts}$

$E_{C+} = +4 \text{ Volts}$

$E_{C+} = 0 \text{ Volts}$

$E_{C+} = -2 \text{ Volts}$

$E_{C+} = -8 \text{ Volts}$

$E_{C+} = -10 \text{ Volts}$

AMPLIFICATION FACTOR ($\mu$) NANOHMS

PLATE RESISTANCE ($R_p$) MICROHMS

TRANSCONDUCTANCE ($g_m$) MICROHMS

$E_b = 75 \text{ Volts}$

$E_b = 75 \text{ Volts}$

$E_b = 75 \text{ Volts}$

$E_b = 75 \text{ Volts}$

FEBRUARY 1, 1963 PLACE #6658
$$E_f = 6.3 \text{ Volts}$$

![Graph showing the relationship between grid and plate currents for different grid voltages.]

**FIG. 1**

- **Note:** Alternative VTVM reading peak voltage and insensitive to waveform variations may be used.