THE 6JM6 IS A BEAM-POWER PENTODE IN THE T-12 COMPACTRON CONSTRUCTION. IT IS DESIGNED PRIMARILY FOR USE AS THE HORIZONTAL-DEFLECTION AMPLIFIER IN TELEVISION RECEIVERS, A SEPARATE CONNECTION IS PROVIDED FOR THE BEAM PLATES (GRID 3) TO MINIMIZE "SNIVETS" EXCEPT FOR HEATER CHARACTERISTICS AND RATINGS, THE 6JM6 IS IDENTICAL TO THE 17JM6.

DIRECT INTERELECTRODE CAPACITANCES
WITHOUT EXTERNAL SHIELD

GRID 1 TO PLATE: G1 TO P
INPUT: G1 TO (H + K + G2 + G3)
OUTPUT: P TO (H + K + G2 + G3)

6.34 pf
16 pf
7.0 pf

HEATER CHARACTERISTICS AND RATINGS
DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS
6.3 VOLTS
1.2 AMPS

LIMITS OF APPLIED VOLTAGE
6.3 ± 0.6 VOLTS

MAXIMUM HEATER - CATHODE VOLTAGE:
HEATER NEG. W/ RESPECT TO CATHODE
TOTAL DC AND PEAK
200 VOLTS
HEATER POS. W/ RESPECT TO CATHODE
DC
100 VOLTS
TOTAL DC AND PEAK
200 VOLTS

CONTINUED ON FOLLOWING PAGE
CONTINUED FROM PRECEDING PAGE

MAXIMUM RATINGS

DC PLATE - SUPPLY VOLTAGE (BOOST + DC POWER SUPPLY), 770 VOLTS
PEAK POSITIVE PULSE PLATE VOLTAGE 6,500 VOLTS
PEAK NEGATIVE PULSE PLATE VOLTAGE 1,500 VOLTS
POSITIVE DC GRID 3 VOLTAGE 70 VOLTS
GRID 2 VOLTAGE 220 VOLTS
NEGATIVE DC GRID 1 VOLTAGE 55 VOLTS
PEAK NEGATIVE GRID 1 VOLTAGE 330 VOLTS
PLATE DISSIPATION A 17.5 WATTS
GRID 2 DISSIPATION 3.5 WATTS
DC CATHODE CURRENT 175 MA.
PLAČ CATHODE CURRENT 550 MA.

GRID 1 CIRCUIT RESISTANCE 1.0 MEGOHMS
BULB TEMPERATURE AT HOTTEST POINT 220 °C

A - IN STAGES OPERATING WITH GRID-LEAK BIAS, AN ADEQUATE CATHODE-BIAS RESISTOR OR OTHER SUITABLE MEANS IS REQUIRED TO PROTECT THE TUBE IN THE ABSENCE OF EXCITATION.

CHARACTERISTICS AND TYPICAL OPERATION

<table>
<thead>
<tr>
<th>PLATE VOLTAGE</th>
<th>5,000</th>
<th>60</th>
<th>250</th>
<th>VOLTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRID 3 - CONNECTED TO CATHODE AT SOCKET</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRID 2 VOLTAGE</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>VOLTS</td>
</tr>
<tr>
<td>GRID 1 VOLTAGE</td>
<td>–</td>
<td>0 ( B )</td>
<td>–22.5</td>
<td>VOLTS</td>
</tr>
<tr>
<td>PLATE CURRENT</td>
<td>–</td>
<td>345</td>
<td>65</td>
<td>MA.</td>
</tr>
<tr>
<td>GRID 2 CURRENT</td>
<td>–</td>
<td>27</td>
<td>1.8</td>
<td>MA.</td>
</tr>
<tr>
<td>TRANSCONDUCTANCE</td>
<td>–</td>
<td>–</td>
<td>7,300</td>
<td>( \mu )WHOS</td>
</tr>
<tr>
<td>PLATE RESISTANCE - APPROX.</td>
<td>–</td>
<td>–</td>
<td>18,000</td>
<td>OHMS</td>
</tr>
</tbody>
</table>

GRID 1 VOLTAGE AT \( I_b = 1.0 \) MA, - APPROX. | –100 | – | –42 | VOLTS

TRIODE AMPLIFICATION FACTOR \( C \) | – | – | 4.4 |

B - APPLIED FOR SHORT INTERVAL (2 SECONDS) SO AS NOT TO DAMAGE TUBE.

C - TRIODE CONNECTION (GRID 2 TIED TO PLATE) WITH \( E_b = E_{c2} = 150 \) VOLTS AND \( E_{c1} = -22.5 \) VOLTS
6JM6

AVERAGE TRANSFER CHARACTERISTICS
E_b = 250 VOLTS
GRID 3 TIED TO CATHODE

GRID 1 VOLTS

PLATE MILLIAMPERES

GRID 2 MILLIAMPERES

GRID 1 VOLTS

TUNG-SOL ELECTRIC INC., ELECTRON TUBE DIVISION, BLOOMFIELD, NEW JERSEY, U.S.A.