TRIODE

COATED UNIPOTENTIAL CATHODE
HEATER
6.3±0.6 VOLTS 200 MA.
AC OR DC
ANY MOUNTING POSITION

THE 6BK4 IS A SHARP CUT-OFF BEAM TRIODE. IT IS DESIGNED FOR THE VOLTAGE REGULATION OF HIGH VOLTAGE, LOW CURRENT DC POWER SUPPLIES IN COLOR TELEVISION.

DIRECT INTERELECTRODE CAPACITANCES

<table>
<thead>
<tr>
<th>Capacitance</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRID TO PLATE</td>
<td>0.03 pf</td>
</tr>
<tr>
<td>GRID TO CATHODE AND HEATER</td>
<td>2.6 pf</td>
</tr>
<tr>
<td>PLATE TO CATHODE AND HEATER</td>
<td>1.0 pf</td>
</tr>
</tbody>
</table>

RATINGS

INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM

VOLTAGE CONTROL SERVICE

MAXIMUM PEAK HEATER-CATHODE VOLTAGE:
HEATER NEGATIVE WITH RESPECT TO CATHODE 220 VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE NOT RECOMMENDED
MAXIMUM DC PLATE VOLTAGE 27 000 VOLTS
MAXIMUM UNREGULATED DC SUPPLY VOLTAGE 60 000 VOLTS
MAXIMUM GRID VOLTAGE:
DC VALUE -135 VOLTS
PEAK VALUE (FOR DURATION OF 20 SEC. MAX.
DURING EQUIPMENT WARM-UP) -440 VOLTS
MAXIMUM DC PLATE CURRENT 1.6 MA.
MAXIMUM PLATE DISSIPATION 25 WATTS
MAXIMUM GRID CIRCUIT RESISTANCE* 3 MEGOHMS

*FOR USE WITH "FLYBACK TRANSFORMER" HIGH VOLTAGE SUPPLY.

CONTINUED ON FOLLOWING PAGE
TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

SHUNT VOLTAGE-REGULATOR TUBE
IN ACCOMPANYING CIRCUIT

UNREGULATED SUPPLY:
DC VOLTAGE
EQUIVALENT RESISTANCE
VOLTAGE DIVIDER VALUES:
$R_1$ (5 WATTS) 220 MEGOHMS
$R_2$ (2 WATTS) 1 MEGOHM
$R_3$ (1/2 WATT) 820 000 OHMS
REFERENCE VOLTAGE SUPPLY:
DC VALUE
EQUIVALENT RESISTANCE
EFFECTIVE GRID-PLATE TRANSCONDUCTANCE
DC PLATE CURRENT:
FOR LOAD CURRENT OF 0 MA.
FOR LOAD CURRENT OF 1 MA.
REGULATED DC OUTPUT VOLTAGE:
FOR LOAD CURRENT OF 0 MA.
FOR LOAD CURRENT OF 1 MA.
AMPLIFICATION FACTOR (APPROX.)

UNREGULATED HIGH-VOLTAGE DC SUPPLY
REGULATED DC OUTPUT VOLTAGE
REFERENCE VOLTAGE SUPPLY

EQUIVALENT RESISTANCE
OF DC SUPPLY

6.3 VOLTS

+ 6BK4 +

R1 R2 R3 6BK4