TENTATIVE CHARACTERISTICS AND RATINGS

HEATER VOLTAGE (A.C. or D.C.) 6.3 Volts
HEATER CURRENT 0.6 Ampere
FOCUSING METHOD Magnetic
DEFLECTION METHOD Magnetic
MAXIMUM SOLID DEFLECTION ANGLE 55 Degrees
PHOSPHOR No. 7
DIRECT INTERELECTRODE CAPACITANCES (Approx.):
   Grid No. 1 to All Other Electrodes 10 μf
   Cathode to All Other Electrodes 8.5 μf
OVERALL LENGTH 20-3/4" ±3/8" — 1-5/8"
GREATEST DIAMETER of BULB 12 ±3/16"
MINIMUM USEFUL SCREEN DIAMETER 10"
BULB SIDE TERMINAL Wafer Octal 8-Pin, Sleeve
BASE Large Cap
RMA BASEING DESIGNATION 5AN
DEFLECTION YOKE:
   Position End Flush with Bulb-Neck Reference
   Line (see OUTLINE DRAWING)
   Length of Field 2" max.

MAXIMUM RATINGS and TYPICAL OPERATING CONDITIONS
Maximum Ratings Are Absolute Values

ANODE (High-Voltage Electrode) VOLTAGE 7700 max. Volts
GRID No. 2 (Accelerating Electrode) VOLTAGE 330 max. Volts
GRID No. 1 (Control Electrode) VOLTAGE Never positive
D-C HEATER-CATHODE POTENTIAL* 125 max. Volts
GRID No. 1-CIRCUIT RESISTANCE 1.5 max. Megohms

TYPICAL OPERATION:
   Anode Voltage** 4000 7000 Volts
   Grid No. 2 Voltage 250 250 Volts
   Grid No. 1 for Visual Cut-Off# -50 -50 Volts
   Values subject to variation of ±50 ±50 Per cent

* With heater negative. Cathode should be returned to one side or to the mid-terp of the heater transformer winding.
** Brilliancy and definition decrease with decreasing anode voltage. In general, anode voltage should not be less than 4000 volts.
# For visual extinction of stationary focused spot.

BASING

The bulb side terminal for the anode is on the same side of the tube as base pin No. 5. Its center will not deviate more than 10° from the plane through the axis of the tube and pin No. 5.

SPOT POSITION

The center of the undeflected unfocused spot will fall within a circle of 25-mm radius concentric with the tube face.

Suitable test conditions are: anode voltage, 4000 volts; spot unfocused; the tube shielded from all extraneous fields. To avoid damage to the tube, make the test with grid No. 1 voltage near cut-off.

from RMA release #301, Aug. 18, 1942
sponsor: "Committee on Cathode Ray Tubes", RMA

August 5, 1942
ANODE CURRENT vs GRID No. 1 VOLTAGE CHARACTERISTIC

Anode Voltage........4000 to 7000 volts
Grid No. 2 Voltage.....250 volts

<table>
<thead>
<tr>
<th>Anode Current, Microamperes</th>
<th>Grid No. 1 Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>-50</td>
</tr>
<tr>
<td>250</td>
<td>-16</td>
</tr>
<tr>
<td>500</td>
<td>-8</td>
</tr>
<tr>
<td>750</td>
<td>-3.6</td>
</tr>
<tr>
<td>1000</td>
<td>0</td>
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August 5, 1942
REFERENCE LINE THROUGH TOP LIP
OF DEFLECTING YOKE.
YOKE HOLDER SHOULD
PROVIDE FOR SPECIFIED
MOVEMENT ALONG TUBE
AXIS.

SMALL WAFER OCTAL
8-PIN BASE
WITH SLEEVE
NO T254

ANODE

10° MAX.

BOTTOM VIEW OF TUBE