**90EY4F**

**Oscilloscope Tube**

**FLAT FACED BULB**

**ELECTROSTATIC FOCUS. ELECTROSTATIC DEFLECTION**

**DATA**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heater Voltage</td>
<td>4.0</td>
</tr>
<tr>
<td>Heater Current</td>
<td>1.0</td>
</tr>
<tr>
<td>a.c. or d.c. volts</td>
<td></td>
</tr>
<tr>
<td>Direct Inter-electrode Capacitances.</td>
<td>25μF</td>
</tr>
<tr>
<td>Modulator to all other electrodes</td>
<td>25μF</td>
</tr>
<tr>
<td>Each X Plate to all other electrodes</td>
<td>25μF</td>
</tr>
<tr>
<td>Each Y Plate to all other electrodes</td>
<td>25μF</td>
</tr>
<tr>
<td>One X to one Y Deflector Plate</td>
<td>6μF</td>
</tr>
<tr>
<td>Cathode to all other electrodes</td>
<td>15μF</td>
</tr>
<tr>
<td>Screen:</td>
<td>Yellow</td>
</tr>
<tr>
<td>Fluorescence</td>
<td></td>
</tr>
<tr>
<td>Afterglow</td>
<td>Yellow</td>
</tr>
<tr>
<td>Persistence of Afterglow (1 sec. min./10 sec. max. for 1% initial brightness)</td>
<td>Long.</td>
</tr>
<tr>
<td>Focusing Method</td>
<td>Electrostatic</td>
</tr>
<tr>
<td>Deflecting Method</td>
<td>Electrostatic</td>
</tr>
<tr>
<td>Overall Length</td>
<td>332 ± 8 mm.</td>
</tr>
<tr>
<td>Greatest Diameter of Bulb</td>
<td>88.5 mm.</td>
</tr>
<tr>
<td>Minimum Useful Screen Diameter</td>
<td>75 mm.</td>
</tr>
<tr>
<td>Mounting Position</td>
<td>Any.</td>
</tr>
<tr>
<td>Base</td>
<td>B.12.D.</td>
</tr>
</tbody>
</table>

**Pin 1—Modulator.**
**Pin 2—Cathode.**
**Pin 3—Heater.**
**Pin 4—Heater.**
**Pin 5—Anode 1.**
**Pin 6—Anode 2.**
**Pin 7—No connection.**
**Pin 8—Y2.**
**Pin 9—X2.**
**Pin 10—Anode 3 and Internal Conductive coating.**
**Pin 11—X1.**
**Pin 12—Y1.**

**Typical Operating Conditions:**

- Anode 1: 2000 volts.
- Anode 2: 700 volts.
- Anode 3 (5000v. max.): 4000 volts.
- Modulator volts for cut-off: -40 to -80 volts.
- 2000 volts.
- 350 volts.
- 2000 volts.

**Deflection Sensitivity:**

- X Plate: 0.085 mm/volt.
- Y Plate: 0.170 mm/volt.
- 0.380 mm/volt.

**Note 2.** The angle between the trace produced by X1 and X2 and the trace produced by Y1 and Y2 is 90° ± 3°.

**Note 3.** The undeflected focused spot will fall within a circle having a 6 mm. radius concentric with the centre of the tube face.
Note 1. When viewing the screen with the tube positioned such that the base spigot is uppermost, a positive voltage applied to the terminal X1 will deflect the spot to the left and a positive voltage applied to the terminal Y1 will deflect the spot upwards.