# RADAR TUBES

12in. diameter tubes with narrow neck and small deflection angle. Suitable for use with either Transistor or Valve circuits in Raw or Synthetic Radar and symbol presentation.

<table>
<thead>
<tr>
<th>FOCUS</th>
<th></th>
<th></th>
<th></th>
<th>Magnetic</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEFLECTION</td>
<td></td>
<td></td>
<td></td>
<td>Magnetic-45°(approx)</td>
</tr>
</tbody>
</table>

**SCREEN.**

<table>
<thead>
<tr>
<th>Phosphor</th>
<th>1240/54HM</th>
<th>1240/54L3M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluorescence</td>
<td>Orange</td>
<td>Orange</td>
</tr>
<tr>
<td>Afterglow</td>
<td>Orange</td>
<td>Orange</td>
</tr>
<tr>
<td>Persistence</td>
<td>Very Long</td>
<td>Long</td>
</tr>
</tbody>
</table>

**PHYSICAL DETAILS.**

<table>
<thead>
<tr>
<th>Base</th>
<th></th>
<th></th>
<th></th>
<th>B9A/D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anode Cap</td>
<td></td>
<td></td>
<td></td>
<td>CTB Cavity Type</td>
</tr>
<tr>
<td>Max. Overall Length</td>
<td></td>
<td></td>
<td></td>
<td>653 mm.</td>
</tr>
<tr>
<td>Neck Diameter</td>
<td></td>
<td></td>
<td></td>
<td>23 mm. (nom.)</td>
</tr>
<tr>
<td>Mounting Position</td>
<td></td>
<td></td>
<td></td>
<td>Any</td>
</tr>
</tbody>
</table>

For other dimensions see outline drawing overleaf.

**BASE CONNECTIONS.**

- Pin 1—Grid: Pin 6—I.C.
- Pin 2—I.C.: Pin 7—N.C.
- Pin 3—Cathode: Pin 8—I.C.
- Pin 4—Heater: Pin 9—1st Anode
- Pin 5—Heater: Side Contact—2nd Anode

**HEATER.**

- Heater Voltage: 6.3 volts
- Heater Current: 0.3 amps

**RATING.**

- Max. A1 Voltage: 600 volts
- Max. A2 Voltage: 15 kV
- Min. A2 Voltage: 8 kV
- Max. Vh-k: 200 volts
- Max. Rg-k: 1.5 MΩ
- Max. Rh-k: 1.0 MΩ

**TYPICAL OPERATION.**

**With Valve Drive.**

- 1st Anode Voltage: 300 volts
- 2nd Anode Voltage: 12 kV
- Vg for visual cut-off: -30 to -90 volts

**With Transistor Drive.**

- 1st Anode Voltage: 100 volts
- 2nd Anode Voltage: 12 kV
- Vg for visual cut-off: -25 volts

Recommended position of focus coil is 170 mm in front of the grid.

*These phosphors are liable to burn if operated with a spot which is stationary or slow moving, and tubes should not be operated under such conditions, even at low beam current. Alternative phosphors for this application can be supplied on request.

†Phosphor Type L3 is flicker free at 10 c/s.

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Tentative Issue 1,
Dec. 1963

FERRANTI LIMITED, GEM MILL, CHADDERTON, OLDHAM, LANCs.
**1240/54HM**

**1240/54L3M**

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**DIA**

**USEFUL SCREEN DIA E**

**R3**

**R2**

**TYPE CT8 CAP**

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**S DIA REFERENCE LINE**

**F DIA**

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<table>
<thead>
<tr>
<th>DIM</th>
<th>MM</th>
<th>IN.</th>
<th>DIM.</th>
<th>MM</th>
<th>IN.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>322 ± 3</td>
<td>12.67 ± 0.12</td>
<td>P</td>
<td>90 ± 5</td>
<td>3.54 ± 0.20</td>
</tr>
<tr>
<td>C</td>
<td>645 ± 8</td>
<td>25.39 ± 0.31</td>
<td>R1</td>
<td>1000</td>
<td>39.37</td>
</tr>
<tr>
<td>D</td>
<td>305 ± 2</td>
<td>12.00 ± 0.08</td>
<td>R2</td>
<td>426</td>
<td>16.77</td>
</tr>
<tr>
<td>E</td>
<td>250 MIN.</td>
<td>9.84 +0.00</td>
<td>R3</td>
<td>19</td>
<td>.75</td>
</tr>
<tr>
<td>F</td>
<td>23 ± 0</td>
<td>-0.066 -0.039</td>
<td>R3</td>
<td>19</td>
<td>.75</td>
</tr>
</tbody>
</table>

**ORIGINAL DIMENSIONS IN MILLIMETERS**

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FERRANTI LIMITED, GEM MILL, CHADDERTON, OLDHAM, LANCS