DATA

**General:**
- Cathode, Ignitor Excited: Mercury-Pool Type
- Starting time at required ignitor voltage or current: 100 μsec
- Anode Voltage Drop: At peak anode current of 1500 amperes: 25 volts

**Cooling:**
- Type: water
- Minimum Water Flow:
  - At no load: 0.5 gpm
  - At rated continuous average current: 1.5 gpm
- Maximum Pressure Drop: At 1.5 gpm: 5 lb./sq.in.
- Minimum Inlet-Water Temperature: 10°C
- Maximum Outlet-Water Temperature: 35°C
- Maximum Water-Temperature Rise: 6°C
- Overall Rigid Length (Approx.): 14-1/2" (including water connections)
- Maximum Diameter: 7-1/4"

**Mounting Position:** Vertical, flexible lead up

**Terminal Connections:**
- P—Anode Terminal (Flexible lead)
- I—Ignitor Terminal (Adjacent to the cathode terminal)
- K—Cathode Terminal (Opposite the anode terminal)

**FREQUENCY-CHANGER RESISTANCE-WELDING SERVICE**

For input-supply frequency from 50 to 60 cycles per second and minimum output frequency of 5 cycles per second

**Maximum Ratings, Absolute Values:**

<table>
<thead>
<tr>
<th></th>
<th>Rating I</th>
<th>Rating II</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PEAK ANODE VOLTAGE:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forward</td>
<td>1200 max.</td>
<td>1500 max.</td>
</tr>
<tr>
<td>Inverse</td>
<td>1200 max.</td>
<td>1500 max.</td>
</tr>
<tr>
<td><strong>ANODE CURRENT:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peak</td>
<td>1500 max.</td>
<td>1200 max.</td>
</tr>
<tr>
<td>Corresponding Average*</td>
<td>20 max.</td>
<td>16 max.</td>
</tr>
<tr>
<td>Average*</td>
<td>70 max.</td>
<td>56 max.</td>
</tr>
<tr>
<td>Corresponding Peak</td>
<td>420 max</td>
<td>336 max</td>
</tr>
<tr>
<td><strong>RATIO OF FAULT ANODE CURRENT TO PEAK ANODE CURRENT:</strong></td>
<td>12.5 max.</td>
<td>12.5 max.</td>
</tr>
</tbody>
</table>

* Ratings are for zero phase-control angle. Straight-line interpolation on log-log paper is permissible between corresponding points.
* Averaged over any 6.25-second maximum interval.

O: See next page.

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TENTATIVE DATA
PEAK IGNITOR VOLTAGE:

Positive \( ^{\circ} \) \( \ldots \ldots \ldots \ldots \) \{\text{Equal to anode} \ \text{volts}\)
\{200 min. \ \text{volts}\)

Negative \( \ldots \ldots \ldots \ldots \) \{5 max. \ \text{volts}\)

IGNITOR CURRENT:

Peak \( ^{\circ} \) \( \ldots \ldots \ldots \ldots \) \{100 max. \ \text{amp}\)
\{30 min. \ \text{amp}\)

RMS. \( \ldots \ldots \ldots \ldots \) \{10 max. \ \text{amp}\)

Average \( \ldots \ldots \ldots \ldots \) \{1 max. \ \text{amp}\)

*Ignition will occur if either minimum peak positive ignitor potential is applied, or minimum peak ignitor current flows, for the indicated starting time (see Cathode).*

*Averaged over any 5-second maximum interval.*

Outline Drawing for the 5822 is the same as shown for Type 5552

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RATING CHART

PEAK FORWARD ANODE VOLTS = \( E_{bm} \)
PEAK INVERSE ANODE VOLTS = \( E_{bmi} \)

\( E_{bm} \) OR \( E_{bmi} \) VOLTS = 1200

1500

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TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

TENTATIVE DATA