This rectifier is directly equivalent to the U.S.A. 705A type.

**CATHODE**
Thoriated tungsten filament with centre tap
Voltage (full filament) $5 \text{ V}$
Nominal current (per half filament) $5 \text{ A}$

**MECHANICAL DATA**
Maximum overall length $128.6 \text{ mm}$
Maximum diameter $65.1 \text{ mm}$
Top cap Tungsten lead
Base B4A
Socket Special
Net weight $90 \text{ g}$

**MAXIMUM RATINGS**
Maximum peak inverse voltage $30 \text{ kV}$
Maximum peak anode current at 30 kV P.I.V. $0.4 \text{ A}$
Maximum average anode current at 30 kV P.I.V. $0.1 \text{ A}$
Maximum peak anode current at 15 kV P.I.V. $0.6 \text{ A}$
Maximum average anode current at 15 kV P.I.V. $0.15 \text{ A}$
Maximum anode dissipation $60 \text{ W}$

**TYPICAL OPERATION (for ideal choke-input filter)**

<table>
<thead>
<tr>
<th>Circuit</th>
<th>No. of Valves</th>
<th>Maximum D.C. output voltage</th>
<th>Maximum D.C. output current</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bi-phase half wave</td>
<td>2</td>
<td>9 kV</td>
<td>0.2 A</td>
</tr>
<tr>
<td>Full wave</td>
<td>4</td>
<td>18 kV</td>
<td>0.2 A</td>
</tr>
</tbody>
</table>
Half-Wave High-Vacuum Rectifier

Code: 705A (CV3587)

BASING
1. FILAMENT
2. FILAMENT C.T.
3. FILAMENT
4. NO CONNEXION
T.L. ANODE

<table>
<thead>
<tr>
<th>DIM</th>
<th>MILLIMETRES</th>
<th>INCHES</th>
<th>DIM</th>
<th>MILLIMETRES</th>
<th>INCHES</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>122.25 MIN</td>
<td>4.813 MIN</td>
<td>E</td>
<td>1.40 MIN</td>
<td>0.055 MIN</td>
</tr>
<tr>
<td></td>
<td>128.60 MAX</td>
<td>5.063 MAX</td>
<td></td>
<td>1.52 MAX</td>
<td>0.060 MAX</td>
</tr>
<tr>
<td>B</td>
<td>65.1 MAX</td>
<td>2.59/16 MAX</td>
<td>F</td>
<td>7.75 MIN</td>
<td>0.305 MIN</td>
</tr>
<tr>
<td></td>
<td>11.30 MAX</td>
<td>0.445 MAX</td>
<td></td>
<td>11.406 MAX</td>
<td>0.445 MAX</td>
</tr>
<tr>
<td>C</td>
<td>35.71 MAX</td>
<td>1.406 MAX</td>
<td>G</td>
<td>0.38 MIN</td>
<td>0.015 MIN</td>
</tr>
<tr>
<td></td>
<td>2.39 MAX</td>
<td>0.094 MAX</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

θ DENOTES: ECCENTRICITY WITH RESPECT TO G OF BASE
NOTE: BASIC DIMENSIONS ARE INCHES

May 1958