

VALVE ELECTRONICCV1183  
(NR61)ADMIRALTY SIGNAL ESTABLISHMENT

|                                                                                             |                                                                                                                                      |                             |                              |
|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------------|
| Specification AD/CV1183/Issue 2.<br>Dated 8.11.46.<br>To be read in conjunction with K1001. | <u>SECURITY</u><br><table border="1"> <tr> <td><u>Specn.</u><br/>Restricted</td><td><u>Valve</u><br/>Unclassified</td></tr> </table> | <u>Specn.</u><br>Restricted | <u>Valve</u><br>Unclassified |
| <u>Specn.</u><br>Restricted                                                                 | <u>Valve</u><br>Unclassified                                                                                                         |                             |                              |

|                                                                        |        |     |   |                   |                 |                    |
|------------------------------------------------------------------------|--------|-----|---|-------------------|-----------------|--------------------|
| <u>TYPE OF VALVE:-</u> Variable- $\mu$ Screen<br>Pentode               |        |     |   | <u>MARKING</u>    |                 |                    |
| <u>CATHODE:-</u> Indirectly heated                                     |        |     |   | See K1001/4.      |                 |                    |
| <u>ENVELOPE:-</u> Glass : clear                                        |        |     |   |                   |                 |                    |
| <u>PROTOTYPE:-</u> W42                                                 |        |     |   |                   |                 |                    |
| <u>RATING</u>                                                          |        |     |   | Note              |                 | <u>BASE</u><br>B7  |
|                                                                        |        |     |   |                   |                 | See K1001/AIV/D5.3 |
| Heater Voltage                                                         | (V)    | 4.0 | A | Pin               | Electrode       |                    |
| Heater Current                                                         | (A)    | 0.6 |   | 1                 | No connection   |                    |
| Max. anode voltage                                                     | (V)    | 250 |   | 2                 | Anode           |                    |
| Max. screen voltage                                                    | (V)    | 125 |   | 3                 | Suppressor grid |                    |
| Mutual conductance                                                     | (mA/V) | 1.5 |   | 4                 | Heater          |                    |
|                                                                        |        |     |   | 5                 | Heater          |                    |
|                                                                        |        |     |   | 6                 | Cathode         |                    |
|                                                                        |        |     |   | 7                 | Screen grid     |                    |
|                                                                        |        |     |   | TC                | Control grid    |                    |
| <u>NOTE</u>                                                            |        |     |   | <u>TOP CAP</u>    |                 |                    |
| A. At $V_a = 250$ V, $V_{g2} = 125$ V,<br>$V_{g3} = 0$ , $V_g = -3$ V. |        |     |   | See K1001/AI/D5.1 |                 |                    |
|                                                                        |        |     |   | <u>DIMENSIONS</u> |                 |                    |
|                                                                        |        |     |   | See K1001/AI/D1.  |                 |                    |
|                                                                        |        |     |   | Dimension         | Min.            | Max.               |
|                                                                        |        |     |   | A mm              | -               | 120                |
| B mm                                                                   |        | 42  |   |                   |                 |                    |
|                                                                        |        |     |   | <u>PACKING</u>    |                 |                    |
|                                                                        |        |     |   | See K1001/7.      |                 |                    |

TESTS

To be performed in addition to those applicable in K1001.

|   | Test Conditions       |                       |                        |                        |                        | Test                                                                       | Limits |      | No.<br>Tested |
|---|-----------------------|-----------------------|------------------------|------------------------|------------------------|----------------------------------------------------------------------------|--------|------|---------------|
|   | V <sub>h</sub><br>(V) | V <sub>a</sub><br>(V) | V <sub>g2</sub><br>(V) | V <sub>g3</sub><br>(V) | V <sub>g1</sub><br>(V) |                                                                            | Min.   | Max. |               |
| a | 4.0                   |                       |                        |                        |                        | I <sub>h</sub> (A)                                                         | 0.5    | 0.7  | 1%<br>(20)    |
| b | 4.0                   | 250                   | 100                    | 0                      | -3                     | Reverse I <sub>g</sub> (μA)                                                | -      | 1.0  | 100%          |
| c | 4.0                   | 250                   | 100                    | 0                      | -3                     | I <sub>a</sub> (mA)                                                        | 5.5    | 9.5  | 100%          |
| d | 4.0                   | 250                   | 100                    | 0                      | -40                    | I <sub>a</sub> tail. (μA)                                                  | 2      | 170  | 100%          |
| e | 4.0                   | 250                   | 100                    | 0                      | -3                     | I <sub>g2</sub> (mA)                                                       | 1.3    | 2.6  | 10%<br>(50)   |
| f | 4.0                   | 250                   | 100                    | 0                      | -2.5                   | Mutual<br>Conductance (mA/V)<br>Grid voltage swing<br>to be $\pm$ 0.5 Volt | 1.0    | 2.0  | 100%          |