

## VALVE ELECTRONIC

(POVT 80A)

GENERAL POST OFFICE: E-IN-C (S)

| Specification: G.P.O./CV 1658/Issue 1<br>Dated: 12-6-46<br>To be read in conjunction with K 1001 | <table border="1"> <tr> <th colspan="2">SECURITY</th></tr> <tr> <td><u>Specification</u></td><td><u>Valve</u></td></tr> <tr> <td>Restricted</td><td>Restricted</td></tr> </table> | SECURITY |  | <u>Specification</u> | <u>Valve</u> | Restricted | Restricted |
|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--|----------------------|--------------|------------|------------|
| SECURITY                                                                                         |                                                                                                                                                                                   |          |  |                      |              |            |            |
| <u>Specification</u>                                                                             | <u>Valve</u>                                                                                                                                                                      |          |  |                      |              |            |            |
| Restricted                                                                                       | Restricted                                                                                                                                                                        |          |  |                      |              |            |            |

—————> indicates a change

|                                                 |        |        |   |                |  |                    |                  |             |
|-------------------------------------------------|--------|--------|---|----------------|--|--------------------|------------------|-------------|
| <u>TYPE OF VALVE:</u> Triode                    |        |        |   | <u>MARKING</u> |  |                    |                  |             |
| <u>CATHODE:</u> Directly heated                 |        |        |   | See K 1001/4   |  |                    |                  |             |
| <u>ENVELOPE:</u> Unmetallised glass             |        |        |   |                |  |                    |                  |             |
| <u>PROTOTYPE</u> L.S. 9B                        |        |        |   |                |  |                    |                  |             |
| <u>RATING</u>                                   |        |        |   | Note           |  | <u>BASE</u>        |                  |             |
|                                                 |        |        |   |                |  | British 4-pin (B4) |                  |             |
|                                                 |        |        |   |                |  | <u>CONNECTIONS</u> |                  |             |
|                                                 |        |        |   |                |  | <u>Pin</u>         | <u>Electrode</u> |             |
| Filament current                                | (A)    | 0.15   |   |                |  | 1                  | Anode            |             |
| Nominal filament voltage                        | (V)    | 2.0    |   |                |  | 2                  | Grid             |             |
| Max. anode voltage                              | (V)    | 150    |   |                |  | 3                  | Filament -       |             |
| Amplification factor                            |        | 30.0   | A |                |  | 4                  | Filament +       |             |
| Anode impedance                                 | (ohms) | 50,000 | A |                |  |                    |                  |             |
|                                                 |        |        |   |                |  | <u>DIMENSIONS</u>  |                  |             |
|                                                 |        |        |   |                |  | See K 1001/A1/D1   |                  |             |
|                                                 |        |        |   |                |  | <u>Dimension</u>   | <u>Min.</u>      | <u>Max.</u> |
|                                                 |        |        |   |                |  | A (mm)             | -                | 127         |
|                                                 |        |        |   |                |  | B (mm)             | -                | 60          |
| <u>NOTE</u>                                     |        |        |   |                |  |                    |                  |             |
| A. Measured with $V_a = 130$ , and $V_g = -1.5$ |        |        |   |                |  |                    |                  |             |

TESTS

To be performed in addition to those applicable in K 1001

|     | TEST CONDITIONS |     |       | TEST                  | LIMITS |      | No.<br>Tested | Note |
|-----|-----------------|-----|-------|-----------------------|--------|------|---------------|------|
|     | If (A)          | Va  | Vg    |                       | Min.   | Max. |               |      |
|     |                 |     |       |                       |        |      |               |      |
| (a) | 0.15            | 0   | 0     | Vf (V)                | 1.8    | 2.2  | 100%          |      |
| (b) | 0.15            | 130 | - 1.5 | Reverse Ig ( $\mu$ A) | -      | 0.5  | 100%          |      |
| (c) | 0.15            | 130 | - 7.0 | Ia ( $\mu$ A)         | -      | 1.5  | 100%          |      |
| (d) | 0.15            | 130 | - 1.5 | Ia (mA)               | 0.6    | 1.1  | 100%          |      |
| (e) | 0.15            | 130 | - 1.5 | gm (mA/V)             | 0.48   | 0.72 | 100%          |      |
| (f) | 0.15            | 130 | - 1.5 | $\mu$                 | 25.0   | 35.0 | 1%            |      |