

VALVE ELECTRONIC **CV 1667**GENERAL POST OFFICE: E-IN-C ( W )

(POVT 94)

|                                             |                      |                   |
|---------------------------------------------|----------------------|-------------------|
| Specification: <b>G.P.O./OV1667/Issue 1</b> | <u>SECURITY</u>      |                   |
| Dated: <b>4.11.46</b>                       | <u>Specification</u> | <u>Valve</u>      |
| To be read in conjunction with K 1001       | <b>Restricted</b>    | <b>Restricted</b> |

—————> indicates a change

|                                     |           |      |   |                |                    |            |
|-------------------------------------|-----------|------|---|----------------|--------------------|------------|
| <u>TYPE OF VALVE:</u> Triode        |           |      |   | <u>MARKING</u> |                    |            |
| <u>CATHODE:</u> Directly heated     |           |      |   | See K1001/4    |                    |            |
| <u>ENVELOPE:</u> Unmetallised glass |           |      |   |                |                    |            |
| <u>PROTOTYPE</u> LS5X               |           |      |   |                |                    |            |
| <u>RATING</u>                       |           |      |   | Note           | <u>BASE</u>        |            |
|                                     |           |      |   |                | British 4-pin (B4) |            |
|                                     |           |      |   |                | <u>CONNEXIONS</u>  |            |
|                                     |           |      |   |                | Pin                | Electrode  |
| Filament current                    | (A)       | 0.94 |   |                | 1                  | Anode      |
| Nominal filament voltage            | (V)       | 6.0  |   |                | 2                  | Grid       |
| Max. anode voltage                  | (V)       | 400  |   |                | 3                  | Filament - |
| Max. anode dissipation              | (W)       | 15.0 |   |                | 4                  | Filament + |
| Amplification factor                |           | 6.0  | A |                |                    |            |
| Mutual conductance                  | (mA/V)    | 1.2  | A |                |                    |            |
| Anode impedance                     | (ohms)    | 5000 | A |                |                    |            |
| <u>CAPACITANCES (pF)</u>            |           |      |   |                | <u>DIMENSIONS</u>  |            |
|                                     |           |      |   |                | See K1001/A1/D1    |            |
| C <sub>ag</sub>                     | (nominal) | 3.5  |   | Dimension      | Min.               | Max.       |
| C <sub>ae</sub>                     | (nominal) | 3.0  |   | A (mm)         | -                  | 130        |
| C <sub>ge</sub>                     | (nominal) | 4.5  |   | B (mm)         | -                  | 61         |

This valve type is obsolete  
and this specification is  
for record purposes only

NOTE

Measured with V<sub>a</sub> = 300,  
and V<sub>g</sub> = -25

To be performed in addition to those applicable in K1001

|     | TEST CONDITIONS                |                  |                                   |            | TEST                                                                   | LIMITS |                  | No.<br>Tested | Note |
|-----|--------------------------------|------------------|-----------------------------------|------------|------------------------------------------------------------------------|--------|------------------|---------------|------|
|     |                                |                  |                                   |            |                                                                        | Min.   | Max.             |               |      |
| (a) | See K1001/AIII                 |                  |                                   |            | <u>CAPACITANCES (pF)</u>                                               |        |                  |               |      |
|     | Links<br>to H.P.               | Links<br>to L.P. | Links<br>to E                     |            |                                                                        |        |                  |               |      |
|     | 1                              | 2                | 3,4,5,6,7,<br>8,9,10,<br>TC1, TC2 | (i) Cag    | 3.0                                                                    | 4.0    | 6<br>per<br>week |               |      |
|     | 1                              | 3,4              | 2,5,6,7,8,<br>9,10,TC1,<br>TC2    | (ii) Cae   | 2.5                                                                    | 3.5    | 6<br>per<br>week |               |      |
|     | 2                              | 3,4              | 1,5,6,7,8,<br>9,10,TC1,TC2        | (iii) Cge  | 4.0                                                                    | 5.0    | 6<br>per<br>week |               |      |
| (b) | Test Voltage<br>500 Volts D.C. |                  |                                   |            | <u>INSULATION (megohms)</u><br><br>Between any two<br>electrodes       | 500    | -                | 1%            |      |
|     | If<br>(A)                      | Va               | Vg                                | Ia<br>(mA) |                                                                        |        |                  |               |      |
| (c) | 0.94                           | -                | -                                 | -          | V <sub>f</sub> (V)                                                     | 5.6    | 6.4              | 100%          |      |
| (d) | 0.94                           | 300              | -25                               | -          | μ                                                                      | 5.0    | 7.0              | 100%          |      |
| (e) | 0.94                           | 300              | -25                               | -          | g <sub>m</sub> (mA/V)                                                  | 1.0    | 1.4              | 100%          |      |
| (f) | 0.94                           | 300              | Adjust                            | 50         | Reverse I <sub>g</sub> (μA)                                            | -      | 0.75             | 100%          |      |
| (g) | 0.94                           | 600              | 600                               | -          | V <sub>f</sub> required to produce<br>emission current of 10 mA<br>(V) | -      | 3.8              | 100%          |      |