

## VALVE ELECTRONIC CV1723

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

POVT 182)

| Specification: G.P.O./CV 1723/Issue 2<br>Dated: 17 - 6 - 46<br>To be read in conjunction with K 1001 | <table> <tr> <th colspan="2"><u>SECURITY</u></th></tr> <tr> <td><u>Specification</u></td><td><u>Valve</u></td></tr> <tr> <td>Restricted</td><td>Restricted</td></tr> </table> | <u>SECURITY</u> |  | <u>Specification</u> | <u>Valve</u> | Restricted | Restricted |
|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--|----------------------|--------------|------------|------------|
| <u>SECURITY</u>                                                                                      |                                                                                                                                                                               |                 |  |                      |              |            |            |
| <u>Specification</u>                                                                                 | <u>Valve</u>                                                                                                                                                                  |                 |  |                      |              |            |            |
| Restricted                                                                                           | Restricted                                                                                                                                                                    |                 |  |                      |              |            |            |

—————> indicates a change

|                                                                                                    |        |      |   |                                                                                             |                    |           |      |
|----------------------------------------------------------------------------------------------------|--------|------|---|---------------------------------------------------------------------------------------------|--------------------|-----------|------|
| <u>TYPE OF VALVE:</u> H.F. Pentode                                                                 |        |      |   | <u>MARKING</u>                                                                              |                    |           |      |
| <u>CATHODE:</u> Directly heated                                                                    |        |      |   | See K 1001/4                                                                                |                    |           |      |
| <u>ENVELOPE:</u> Metallised glass                                                                  |        |      |   | <u>BASE</u>                                                                                 |                    |           |      |
| <u>PROTOTYPE</u> V 257                                                                             |        |      |   | Mazda Octal (MO)                                                                            |                    |           |      |
| <u>R A T I N G</u>                                                                                 |        |      |   | Note                                                                                        | <u>CONNECTIONS</u> |           |      |
|                                                                                                    |        |      |   |                                                                                             | Pin                | Electrode |      |
| Filament voltage                                                                                   | (V)    | 2.0  | A | 1                                                                                           | Filament           |           |      |
| Nominal filament current                                                                           | (A)    | 0.15 |   | 2                                                                                           | Pin omitted        |           |      |
| Max. anode voltage                                                                                 | (V)    | 150  |   | 3                                                                                           | Anode              |           |      |
| Max. screen voltage                                                                                | (V)    | 150  |   | 4                                                                                           | G2                 |           |      |
| Min. mutual conductance                                                                            | (mA/V) | 2.3  |   | 5                                                                                           | G3                 |           |      |
|                                                                                                    |        |      |   | 6                                                                                           | Metallising        |           |      |
|                                                                                                    |        |      |   | 7                                                                                           | Pin omitted        |           |      |
|                                                                                                    |        |      |   | 8                                                                                           | Filament           |           |      |
|                                                                                                    |        |      |   | TC                                                                                          | G1                 |           |      |
| <u>CAPACITANCES (pF)</u>                                                                           |        |      |   | <u>TOP CAP</u>                                                                              |                    |           |      |
| C <sub>ag</sub>                                                                                    | (max)  | 0.02 |   | See K 1001/A1/D5.1                                                                          |                    |           |      |
| C <sub>ae</sub>                                                                                    | (max)  | 6.7  |   | <u>DIMENSIONS</u>                                                                           |                    |           |      |
| C <sub>ge</sub>                                                                                    | (max)  | 9.7  |   | See K 1001/A1/D1                                                                            |                    |           |      |
|                                                                                                    |        |      |   | Dimension                                                                                   |                    | Min.      | Max. |
|                                                                                                    |        |      |   | A (mm)                                                                                      |                    | -         | 100  |
|                                                                                                    |        |      |   | B (mm)                                                                                      |                    | -         | 33   |
| <div>This valve type is obsolete<br/>and this specification is for<br/>record purposes only.</div> |        |      |   | <u>NOTE</u>                                                                                 |                    |           |      |
|                                                                                                    |        |      |   | A. Measured with V <sub>a</sub> = 120, V <sub>g1</sub> = -0.5,<br>and V <sub>g2</sub> = 120 |                    |           |      |

TESTS

To be performed in addition to those applicable in K 1001

|     | TEST CONDITIONS  |                  |                            |     |      | TEST                     | LIMITS    |                | No.<br>Tested | Note             |  |
|-----|------------------|------------------|----------------------------|-----|------|--------------------------|-----------|----------------|---------------|------------------|--|
|     |                  |                  |                            |     |      |                          | Min.      | Max.           |               |                  |  |
| (a) | See K 1001/A III |                  |                            |     |      | <u>CAPACITANCES (pF)</u> |           |                |               |                  |  |
|     | Links<br>to H.R. | Links<br>to L.P. | Links<br>to E.             |     |      |                          |           |                |               |                  |  |
|     | 3                | TC1              | 1,2,4,5,6,7,<br>8,9,10,TC2 |     |      |                          | (i) Cag   | -              | 0.02          | 6<br>per<br>week |  |
|     | 3                | 1,4,5,<br>6,3    | 2,7,9,10,<br>TC1, TC2      |     |      |                          | (ii) Cae  |                | 6.7           | 6<br>per<br>week |  |
|     | T.C1             | 1,4,5,<br>6,8    | 2,3,7,9,<br>10,TC2         |     |      |                          | (iii) Cge |                | 9.7           | 6<br>per<br>week |  |
|     | Vf(DC)           | Va               | Vg2                        | Vg3 | Vg1  |                          |           |                |               |                  |  |
| (b) | 2                | 0                | 0                          | 0   | 0    | If (A)                   | 0.135     | 0.165          | 100%          |                  |  |
| (c) | 2                | 120              | 120                        | 0   | -1   | Ia (mA)                  | 0.8       | 2.8            | 100%          |                  |  |
| (d) | 2                | 120              | 120                        | 0   | -1   | Ig2 (mA)                 | -         | $\frac{Ia}{3}$ | 100%          |                  |  |
| (e) | 2                | 120              | 120                        | 0   | -3   | Ia (mA)                  | -         | 0.1            | 100%          |                  |  |
| (f) | 2                | 120              | 120                        | 0   | -0.5 | gm (mA/V)                | 2.3       | -              | 100%          |                  |  |
| (g) | 2                | 120              | 120                        | 0   | -1   | Reverse Ig1 (μA)         | -         | 0.5            | 100%          |                  |  |
| (h) | 2                | 120              | 120                        | 0   | -20  | Reverse Ig1 (μA)         | -         | 0.3            | 100%          |                  |  |
| (j) | 2                | 120              | 120                        | 0   | 0    | Positive Ig1 (μA)        | -         | 0.3            | 100%          |                  |  |