

VALVE ELECTRONIC**CV1186**

(NR85 ARP17)

ADMIRALTY SIGNAL ESTABLISHMENT

| Specification AD/CV1186/Issue 4.<br>Dated 10.6.47.<br>To be read in conjunction with K1001. | <table border="1"> <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>Unclassified</td></tr> </table> | <u>SECURITY</u> |  | <u>Specification</u> | <u>Valve</u> | Restricted | Unclassified |
|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--|----------------------|--------------|------------|--------------|
| <u>SECURITY</u>                                                                             |                                                                                                                                                                                            |                 |  |                      |              |            |              |
| <u>Specification</u>                                                                        | <u>Valve</u>                                                                                                                                                                               |                 |  |                      |              |            |              |
| Restricted                                                                                  | Unclassified                                                                                                                                                                               |                 |  |                      |              |            |              |

|                                                                  |  |  |      |                   |             |                  |
|------------------------------------------------------------------|--|--|------|-------------------|-------------|------------------|
| <u>TYPE OF VALVE:-</u> Output tetrode or pentode.                |  |  |      | <u>MARKING</u>    |             |                  |
| <u>CATHODE:-</u> Indirectly heated.                              |  |  |      | See K1001/4.      |             |                  |
| <u>ENVELOPE:-</u> Glass - unmetallised.                          |  |  |      |                   |             |                  |
| <u>PROTOTYPES:-</u> KT63, 6F6G.                                  |  |  |      | <u>BASE</u>       |             |                  |
|                                                                  |  |  |      | IO                |             |                  |
|                                                                  |  |  |      | See K1001/AIV/D2. |             |                  |
| <u>RATING</u>                                                    |  |  | Note | <u>Pin</u>        |             | <u>Electrode</u> |
|                                                                  |  |  |      |                   |             |                  |
| Heater Voltage (V)                                               |  |  | 6.3  |                   | 1           | No Connection    |
| Heater Current (A)                                               |  |  | 0.7  |                   | 2           | Heater           |
| Max. Anode Voltage (V)                                           |  |  | 250  |                   | 3           | Anode            |
| Max. Screen Voltage (V)                                          |  |  | 250  |                   | 4           | Screen Grid      |
| Average Anode Current (mA)                                       |  |  | 34   | A                 | 5           | Control Grid     |
| Average Screen Current (mA)                                      |  |  | 5.5  | A                 | 6           | Pin omitted      |
| Anode Dissipation (W)                                            |  |  | 8.5  |                   | 7           | Heater           |
| Mutual Conductance (mA/V)                                        |  |  | 2.5  | A                 | 8           | Cathode          |
| <u>CAPACITANCES (pF)</u>                                         |  |  |      | <u>DIMENSIONS</u> |             |                  |
| Cag                                                              |  |  | 0.95 | See K1001/AI/D1.  |             |                  |
| Cge                                                              |  |  | 10.0 |                   |             |                  |
| Cae                                                              |  |  | 8.8  |                   |             |                  |
| <u>NOTE</u>                                                      |  |  |      |                   |             |                  |
| A. $V_a = V_{g2} = 250 \text{ V}$ , $V_{g1} = -16.5 \text{ V}$ . |  |  |      |                   |             |                  |
|                                                                  |  |  |      | <u>Dimension</u>  | <u>Min.</u> | <u>Max.</u>      |
|                                                                  |  |  |      | A mm              | -           | 120              |
|                                                                  |  |  |      | B mm              | -           | 46               |
| <u>PACKING</u>                                                   |  |  |      |                   |             |                  |
| See K1001/7.                                                     |  |  |      |                   |             |                  |

TESTS

To be performed in addition to those applicable in K1001.

|   | Test Conditions |           |            |            | Test            | Limits |      | No.<br>Tested |
|---|-----------------|-----------|------------|------------|-----------------|--------|------|---------------|
|   | Vh<br>(V)       | Va<br>(V) | Vg2<br>(V) | Vg1<br>(V) |                 | Min.   | Max. |               |
| a | 6.3             |           |            |            | Ih (A)          | 0.60   | 0.77 | 100%          |
| b | 6.3             | 250       | 250        | -16.5      | Ia (mA)         | 23     | 45   | 100%          |
| c | 6.3             | 250       | 250        | -16.5      | Ig2 (mA)        | 4.0    | 9.0  | 100%          |
| d | 6.3             | 250       | 250        | -16.5      | gm (mA/V)       | 1.9    | 3.0  | 100%          |
| e | 6.3             | 250       | 250        | -16.5      | Reverse Ig (uA) | -      | 2.5  | 100%          |