

|                                                                                                         |                                    |                            |
|---------------------------------------------------------------------------------------------------------|------------------------------------|----------------------------|
| Specification MAP/ <b>CV1136</b> /Issue 5<br>Dated 10.4.47.<br>To be read in conjunction with<br>K1001. | <u>SECURITY</u>                    |                            |
|                                                                                                         | <u>Specification</u><br>RESTRICTED | <u>Valve</u><br>RESTRICTED |

—————→ Indicates a change

|                                                 |      |             |                                                                                                      |                  |
|-------------------------------------------------|------|-------------|------------------------------------------------------------------------------------------------------|------------------|
| <u>TYPE OF VALVE</u> - H.F. Pentode             |      |             | <u>MARKING</u><br><br>See K1001/4.                                                                   |                  |
| <u>CATHODE</u> - Indirectly heated              |      |             |                                                                                                      |                  |
| <u>ENVELOPE</u> - Glass-enclosed in metal shell |      |             |                                                                                                      |                  |
| <u>PROTOTYPE</u> - RL 7.                        |      |             |                                                                                                      |                  |
| <u>RATING</u>                                   |      | Note        | <u>BASE</u><br>B9G                                                                                   |                  |
|                                                 |      |             | <u>Pin</u>                                                                                           | <u>Electrode</u> |
| Heater Voltage (V)                              | 6.3  | A<br>A<br>A | 1                                                                                                    | Heater           |
| Heater Current (A)                              | 0.3  |             | 2                                                                                                    | Anode            |
| Max. Anode Voltage (V)                          | 300  |             | 3                                                                                                    | Screen grid      |
| Max. Screen Voltage (V)                         | 300  |             | 4                                                                                                    | Internal screen  |
| Max. Anode Dissipation (W)                      | 3.0  |             | 5                                                                                                    | Internal screen  |
| Max. Screen Dissipation (W)                     | 1.7  |             | 6                                                                                                    | Control grid     |
| Mutual Conductance (mA/V)                       | 7.7  |             | 7                                                                                                    | Internal screen  |
| Anode Impedance (MΩ)                            | 0.5  |             | 8                                                                                                    | Internal screen  |
| Inner Amplification Factor                      | 80   |             | 9                                                                                                    | Heater           |
| Max. Operating Frequency (Mc/s)                 | 300  |             | Cathode and suppressor grid connected internally to screen.                                          |                  |
| <u>CAPACITANCES (pF)</u>                        |      |             | <u>DIMENSIONS</u><br><br>See K1001/AI/D2<br><br>Groove referred to in Note 1 of drawing is required. |                  |
| C <sub>ae</sub>                                 | 5.3  |             |                                                                                                      |                  |
| C <sub>ge</sub>                                 | 8.8  |             |                                                                                                      |                  |
| C <sub>ag</sub> (max.)                          | 0.02 |             |                                                                                                      |                  |
| C <sub>g1g2</sub>                               | 2.1  |             |                                                                                                      |                  |

NOTE

A. At  $V_a = V_{g2} = 250$ ,  $I_a = 10$  mA.

To be performed in addition to those applicable in K1001.

|   | Test Conditions                                                                        |                                |                                  |                 |                        | Test                              | Limits |      | No. Tested      |      |                  |
|---|----------------------------------------------------------------------------------------|--------------------------------|----------------------------------|-----------------|------------------------|-----------------------------------|--------|------|-----------------|------|------------------|
|   |                                                                                        |                                |                                  |                 |                        |                                   | Min.   | Max. |                 |      |                  |
| a | See K1001/AIII<br>Measurements to be made in<br>Adaptor Type 39, Ref. No.<br>10A/13335 |                                |                                  |                 |                        | <u>CAPACITANCES (pF)</u>          |        |      |                 |      |                  |
|   | Links<br>to HP                                                                         | Links<br>to LP                 | Links<br>to E.                   |                 |                        |                                   |        |      |                 |      |                  |
|   | 2                                                                                      | 1,3,4,5,7,<br>8,9,10           | 6, TC1,<br>TC2                   | C <sub>ae</sub> | 4.5                    |                                   |        |      |                 | 6.0  | 6<br>per<br>week |
|   | 6                                                                                      | 1,3,4,5,7,<br>8,9,10           | 2, TC1,<br>TC2                   | C <sub>ge</sub> | 7.5                    |                                   |        |      |                 | 10.0 |                  |
|   | 2                                                                                      | 6                              | 1,3,4,5,<br>7,8,9,10<br>TC1, TC2 | C <sub>ag</sub> | -                      | 0.02                              | T.A.   |      |                 |      |                  |
|   | V <sub>h</sub>                                                                         | V <sub>a</sub>                 | V <sub>g2</sub>                  | V <sub>g1</sub> | I <sub>a</sub><br>(mA) |                                   |        |      |                 |      |                  |
| b | 6.3                                                                                    | 0                              | 0                                | 0               | 0                      | I <sub>h</sub> (A)                | 0.27   | 0.33 | 100%<br>or S    |      |                  |
| c | 6.3                                                                                    | 250                            | 250                              | -               | 10                     | V <sub>g</sub> (V)                | -1.1   | -2.1 | 100%            |      |                  |
| d | 6.3                                                                                    | 250                            | 250                              | -               | 10                     | Reverse I <sub>g</sub> (μA)       | -      | 0.5  | 100%            |      |                  |
| e | 6.3                                                                                    | 250                            | 250                              | -               | 10                     | g <sub>m</sub> (mA/V)             | 6.1    | 9.3  | 100%            |      |                  |
|   |                                                                                        | Peak grid swing ±0.5V.<br>max. |                                  |                 |                        |                                   |        |      |                 |      |                  |
| f | 6.3                                                                                    | 250                            | 250                              | -               | 10                     | I <sub>g2</sub> (mA)              | 1.15   | 1.75 | 100%<br>or S    |      |                  |
| g | 6.3                                                                                    | 250                            | 250                              | -               | 10                     | Input Impedance<br>at 40 Mc/s (Ω) | 9,000  | -    | (See<br>Note 1) |      |                  |

## NOTE

- Input impedance measurements are to be made on 50% of the valves selected for capacitance measurements.

