

ELECTRONIC VALVE SPECIFICATIONS

SPECIFICATION MOS/CV 2347

ISSUE 1 DATED 18.1.55

AMENDMENT NO. 1

Page 2 Note 1

Add to existing wording:-

"If the control grid current is rising after a two-minute test, the test may be continued up to eight minutes, after which time the control grid current shall not exceed the specified maximum, and shall not be rising".

August 1960
N.33643

T.V.C. for S.R.D.E.

MINISTRY OF SUPPLY - S.R.D.E.

| | | |
|---|--------------------------------------|------------------------------|
| Specification MOS/CV2347 Issue 1 Dated 18.1.55. To be read in conjunction with K.1001 | <u>SECURITY</u> | |
| | <u>Specification</u> UNCLASSIFIED | <u>Valve</u> UNCLASSIFIED |

—————> Indicates a change

| | | | |
|--|------|---|-------------------------|
| TYPE OF VALVE - Beam Power Amplifier | | <u>MARKING</u> | |
| CATHODE - Indirectly heated | | See K.1001/4. | |
| ENVELOPE - Glass - unmetallised | | <u>BASE</u> | |
| PROTOTYPE - 5B/258 M. | | B8G | |
| <u>RATING</u> | | Note | <u>CONNECTIONS</u> |
| Heater Voltage (V) | 19.0 | A B B | Pin |
| Heater Current (A) | 0.3 | | Electrode |
| Max. Anode Voltage (V) | 600 | | 1 Heater |
| Max. Anode Voltage (Ia = 0) (V) | 750 | | 2 Cathode & Beam Plates |
| Max. Screen Voltage (V) | 300 | | 3 Grid 2 |
| Max. Anode Current (mA) | 120 | | 4 Cathode & Beam Plates |
| Max. Anode Dissipation (W) | 25 | | 5 Grid 1 |
| Max. Screen Dissipation (W) | 4.5 | | 6 Grid 1 |
| Mutual Conductance (mA/V) | 6 | | 7 Cathode & Beam Plates |
| Inner μ | 9 | | 8 Heater |
| Max. D.C. Control Grid Voltage (V) | -200 | T.C. Anode | |
| Max. R.F. Voltage between Control and Screen Grids (V) | 1000 | <u>TOP GAP</u> | |
| Max. Frequency for above ratings (Mc/s) | 60 | See K.1001/A1/D5.2. | |
| <u>CAPACITANCES</u> (pF) | | <u>DIMENSIONS</u> | |
| Cag1 | 0.1 | See K.1001/A1/D7. | |
| Cge | 13 | Dimensions | Min. Max. |
| Ca2 | 7 | A mm | - 105.6 |
| | | B mm | - 30.15 |
| | | L mm | - 92.1 |
| <u>NOTES</u> | | | |
| A. Absolute Maximum Values. | | | |
| B. Measured at Va = 300V; Vg2 = 250V; Ia = 72 mA. | | | |

Z.8293.R.

CV2347/1/1

To be performed in addition to those applicable in K.1001

| Test Conditions | | | | | | Test | Limits | | No. Tested | Note | | | |
|--|---------------|---------------|-------------------------|--------|---------|----------------------------------|--------|------|------------|-----------|----------------------|---|-----|
| | | | | | | | Min | Max. | | | | | |
| See K.1001/A.111 | | | | | | <u>CAPACITANCES (pF)</u> | | | 6 | per week | | | |
| a | Links to H.P. | Links to L.P. | Links to E. | | | | | | | | (i) Cag ₁ | - | 0.2 |
| | TC1 | 5,6 | 1,2,3,4,7,8,9,10 TC2 | | | | | | | | (ii) Cae | - | 8.0 |
| | TC1 | 1,2,3,4,7,8 | 5,6,9,10, TC2 | | | (iii) Cge | - | 14.0 | | | | | |
| | 5,6 | 1,2,3,4,7,8 | 9,10,TC1, TC2 | | | | | | | | | | |
| | Vh | Va | Vg2 | Vg1 | Ia (mA) | | | | | | | | |
| b | 19.0 | - | - | - | - | Ih | (A) | 0.27 | 0.33 | 100% or S | | | |
| c | 19.0 | 500 | 300 | Adjust | 50 | Reverse I _{g1} (Note 1) | (μA) | - | 5.0 | 100% | | | |
| d | 19.0 | 500 | 300 | - | 28 | Vg1 | (V) | -25 | -40 | 100% | | | |
| e | 19.0 | 500 | 300 | - | 28 | I _{g2} | (mA) | - | 2.5 | 100% | | | |
| f | 19.0 | 500 | 300 | -75 | - | I _a cut-off | (mA) | - | 1.0 | 100% | | | |
| g | 19.0 | 300 | 300 | 300 | - | I _e (note 2) | (A) | 3.5 | - | 100% | | | |
| <u>NOTES</u> | | | | | | | | | | | | | |
| 1. After 2 minutes the reverse current to the control grid shall not exceed the value specified and shall not be rising. | | | | | | | | | | | | | |
| 2. This test shall be carried out by the application of a 2μsec. pulse of 300 volts peak amplitude and 50 c/s repetition frequency between the cathode and all other electrodes strapped together. | | | | | | | | | | | | | |