NOTE

SPECIFICATION MOA/CV2473, ISSUE 1 REPRINT Λ

To complete the above specification the existing 3 pages of MIL-E-1/9790 must be retained.

TVC Office

56640

VALVE ELECTRONIC

Page A (No of Pages: - 3+5) MINISTRY OF AVIATION. (R.R.E.)

CV 2473

Specification MOA/CV2473 Issue No. 1, reprint A, dated 17.3.61
To be read in conjunction with K1006 and with MIL-E-1/979C dated 18th June, 1957. See Note

Security

Specification Unolassified

Valve Unclassified

Indicates a change

Type of Valve

Pulse Magnetron

Prototype

Fixed Frequency 4J50A with different frequency,

MARKINGS See K1001/4

Additional Markings

with modified mounting plate, and modified cooling fins.(VX2525).

(a) Serial No.

(b) Frequency as measured in the test specification shall be indicated in Mc/s, in association with the serial No. the first and last figures being omitted e.g. valve number 1234 on a frequency of 9231 Mc/s would be marked "Serial 1234/23"

RATING

Rating as on Page 1 of MIL-E-1/979C with additions as in Notes AA-CC.

TESTS

Tests as on pages 2 and 3 of MIL-E-1/979C with additions as in notes EE-HH.

Connections & Dimensions

As on pages 5 and 6 of MIL-E-1/979C read in conjunction with drawing on page C. Notes EE and KK also apply.

NOTES

- A.A. Amend frequency to 9240 Mc/s.
- B.B. The duty cycle of .001 may be exceeded provided that Pi does not exceed 635 watts, and that ib lies between 15 amps and the stated MAXimum limits.
- C.C. Output Coupling Add: - Magnetron couples to choke flange Z830033. Details of this and related items are given in RCL351, 352, which may be obtained from Radio Components Standardisation Committee, 77-91, New Oxford Street, London W.C.1.
- D.D. Copies of "Inspection Instructions for Electron Tubes" (ASESA) as called up in MIL-E-1 can be obtained from the Secretary, TL5(b), The Ministry of Aviation, Castlewood House, 77-91, New Oxford Street, London W.C.1.
- Page 2(a) Qualification Approval: Read as required for CV markings. (b) E.E. Dimensions: Read as "per outline drawing" on pages 4 and 5 but with modified mounting plate and cooling fins as detailed on Page C.
 - (c) Carton Drop: Add: to meet the requirements of Kl005.

F.F. Pages 2 and 3 Amend frequencies as under :-

Phase of Sink

9240 Mc/s.

Osc 1 Frequency

9210 - 9270 Mc/s.

Life Test End points 9210 - 9270 Mc/s.

Note 5

9150 - 9290 Mc/s.

G.G. The following shall refer to r.r.v. for Osc 1 and Osc 2:-

> The Rate of Rise of Voltage of the test modulator shall be determined by the method given below.

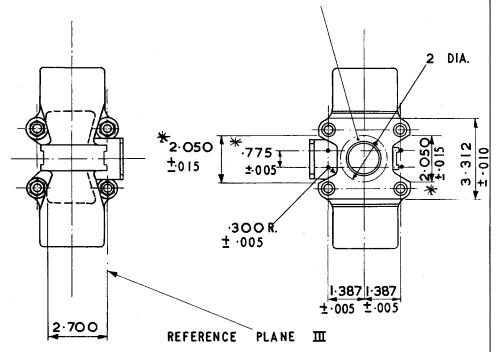
The value obtained for the Rate of Rise of Voltage must not be less than the value specified. A modulator will be accepted as having suitable characteristics in respect of Rate of Rise of Voltage if the instantaneous value of the Rate of Rise of Voltage measured with the modulator adjusted to give the specified operating conditions with the magnetron under test and with the magnetron then replaced by a capacitor of value equal to the nominal input capacitance of the magnetron where specified and otherwise equal to the average calue for the type of magnetron submitted, the measurement being made over the interval between the point where the voltage first equals 80% and the point where the voltage first equals 100% of the Pulse Voltage of the magnetron under test, measured under the conditions obtaining during the test, does not fall after the maximum in this interval to not less than 95% of its maximum value nor has a value less than 90% of its maximum at any point in the interval.

Measurement of Rate of Rise of Voltage. The Rate of Rise of Voltage is defined as the maximum instantaneous value of the rate of rise of voltage measured across the magnetron under Test after the voltage first exceeds 80% of the Pulse Voltage of the magnetron under test measured under the conditions specified for the test.

- No technical information shall appear on the valve or its packing, except H.H. as required under "Markings".
- J.J. Delete Note 9.
- The diameter of the undimensioned collar on the cathode terminal shall not K.K. exceed 1.375 inches. (This can be found on the central projection and on the two left hand sorap views of the terminal and assemblies).

CV2473/1A/B.





FOR FURTHER DIMENSIONS & INFORMATION SEE SPEC. MIL-E-I/979C. ON SPEC. MIL-E-I/979C DIMNS. B & C ARE REDUNDANT, DIMNS. H & AU ARE REPLACED.

** THESE DIMNS. SHALL BE EQUALLY SPACED ABOUT THE CENTRE LINE CONTROLLING THE FIXING HOLES

DIMENSIONS IN INCHES