VALVE ELECTRONIC **CV1256**
(NT99)

ADMIRALTY SIGNAL ESTABLISHMENT

Specification AD/CV1256/Issue 4. Dated 16.6.47. To be read in conjunction with K1001, ignoring clauses:- 5.2; 5.8.	SECURITY	
	Specification	Valve
	Restricted	Unclassified

TYPE OF VALVE:- Triode, with forced air-cooled anode.
CATHODE:- Indirectly heated, oxide coated.
ENVELOPE:- Metal/Glass.
PROTOTYPE:- E1232.

MARKING

See K1001/4.

DIMENSIONS AND CONNECTIONS

See Fig. 1, Page 3.

RATING

		Note
Heater Voltage (V)	6.0	
Heater Current (A)	6.5	
Average Grid Voltage (V)	-31	
Max. Peak Anode Voltage (kV)	12	B
Max. Anode Dissipation (W)	150	A
Wavelength of operation (cms)	50	
Amplification Factor	22	C

CAPACITANCES (pF.)

Cag	8.0
Cgc	11.0
Cac	2.25

GAUGE

A.S.E. Gauge No. 334 is used to check the grid seal.
See Fig. 2, page 4.

PACKAGING

See K1005.

NOTES

A. During testing and operation, the air-cooled surface of the anode must be maintained below 140°C. A blast of air blown into the anode diffuser at a rate of at least 5 cu.ft./min., and into the grid seal or lead at the rate of about 1 cu.ft./min., is suggested.

B. The valves, when operated in push-pull oscillator, modulated by a pulse length of 1 μS at P.R.F. 500/sec., with Va not more than 12 kV shall withstand being switched on in two stages, viz. :- Half Va to full Va without conditioning other than that given by the manufacturers.

C. At Va = 1 kV, Ia = 100 mA.

TESTS

To be performed in addition to those applicable in K1001.

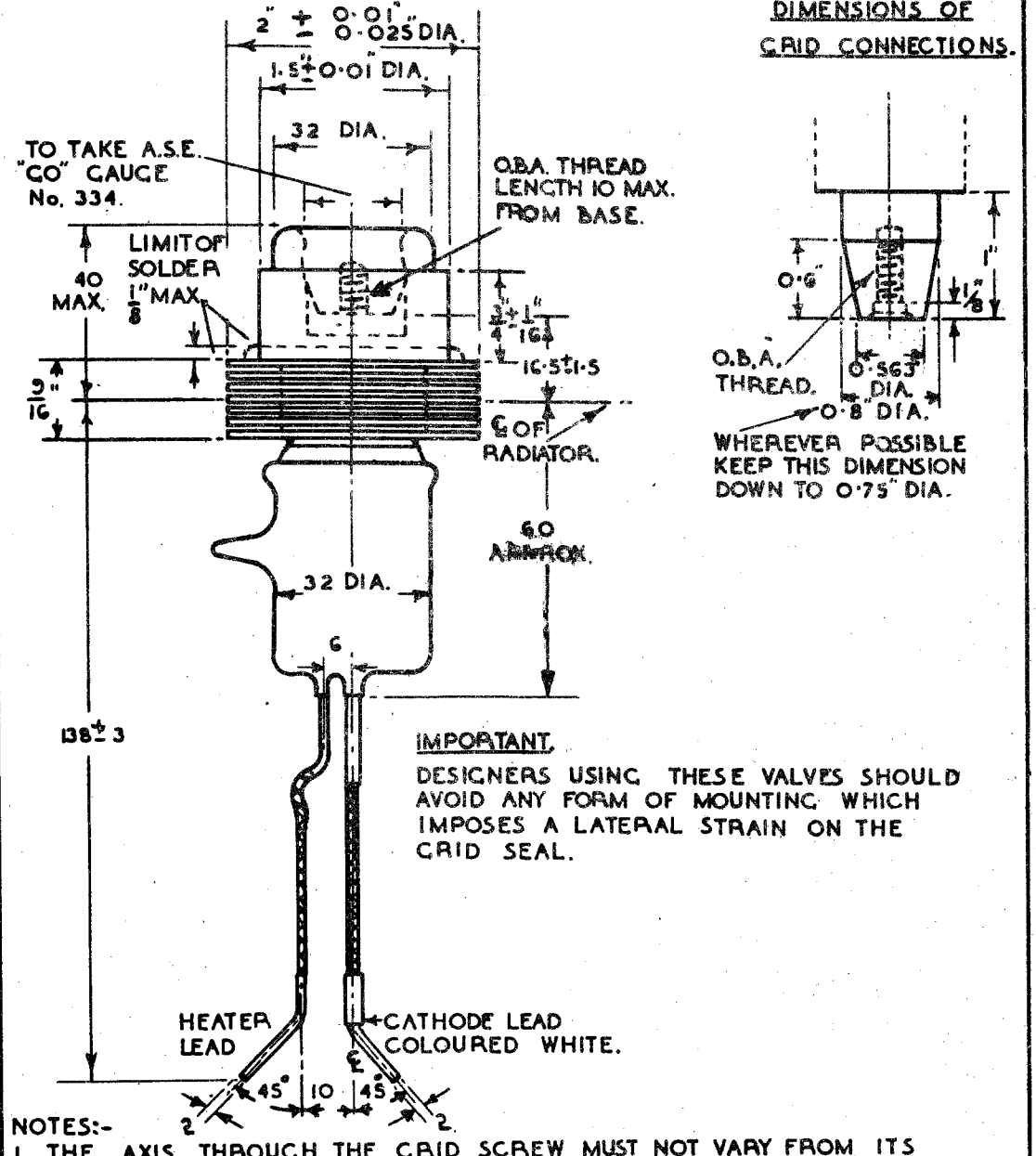
	Test Conditions			Test	Limits		No. Tested	Note
	Vh (V)	Va (V)	Ia (mA)		Min.	Max.		
a	6.0	-	-	Ih (A)	5.85	7.15	100%	
b	6.0	1000	100	Vg (V)	-19	-43	100%	
c	6.0	1000	100	Reverse Ig (μA) (gas component)	-	10	100%	1
d	6.0	1000	100	Reverse Ig (mA) (grid emission)	-	10	100%	1
e	6.0	500	100	i. Vg (V)	Must not be positive		100%	
				ii. Change in Vg from value in test 'b' (V)	-17	-29	100%	
f	6.0	Va = Vg = 1000 V.		Peak emission (Ia + Ig) (A)	40	-	100%	2
g	Valve cold			Capacitances (pF.)				
				i. Cag	6	10	Type Ap-	
				ii. Cgc	8.25	13.75	proval	
				iii. Cac	1.5	3.0		

NOTES

1. The gas component of -Ig can be taken as the immediate decrease in -Ig when -Vg is rapidly increased to cut off Ia. The presence of unsaturated grid emission may render test 'c' impossible.
2. The peak emission is to be measured under pulse conditions with a pulse length of 2 μS at P.R.F. 50/sec. The shape of the pulse is to be sinusoidal.

FIG 1.

OUTLINE DIMENSIONS.



NOTES:-

1. THE AXIS THROUGH THE GRID SCREW MUST NOT VARY FROM ITS NOMINAL POSITION WITH RESPECT TO THE CORONA RING AND ANODE RADIATOR BY MORE THAN 0·10".
2. ALL DIMENSIONS ARE IN MMS. UNLESS OTHERWISE STATED.

A.S.E. GAUGE No 334

MATERIAL BRASS OR MILD STEEL