ADMIRALTY SIGNAL AND RADAR ESTABLISHMENT

VALVE ELECTRONIC **CV2399.**

Specification AD/CV2399 Issue No. 1 dated 14th December, 1956. To be read in conjunction with K1001	**SECURITY** Specification: Unclassified Valve: Unclassified

TYPE OF VALVE: Half-Wave Xenon-filled Rectifier

CATHODE: Directly heated; oxide coated.

ENVELOPE: Glass, clear.

PROTOTYPE: GXU.3 (E.2542)

MARKING

See K1001/4

BASE

Goliath Edison Screw

RATINGS

(All limiting values are absolute)

Filament Voltage	(V)	4.0
Filament Current	(A)	11.0
Max. Peak Inverse Anode Voltage	(kV)	13.0
Max. Peak Anode Current	(A)	6.0
Max. Mean Anode Current	(A)	1.25
Max. Operating Frequency	(c/s)	150
Voltage Drop across Valve	(V)	13
Max. Permissible Ambient Temperature Range	(°C)	-55 to +70
Min. Cathode heating Time	(Secs)	30

CONNECTIONS

Thread	f
Button	f
T C	a

TOP CAP

See Drawing on Page 3

(The CT9 cap meets these requirements)

DIMENSIONS

See Drawing on Page 3

NOTES

A. The valve may be mounted in any position.

B. The valve can be used as a replacement for CV5 in all applications of the latter in which the peak inverse voltage does not exceed 13 kV.

TESTS

To be performed in addition to those applicable in K1001, after a holding period of 28 days.

In all tests except test (d), Vf = 4.0V (r.m.s.)

	Test	Test Conditions	AQL	Insp. Level	Limits Min.	Limits Max.	Note
a	If (A)		6.5	II	10	12	
b	OPERATION	Operate valve(s) in a rectifier circuit using 50 c/s ac, dc output current of 1.25A per valve, and anode PIV of 14.5 kV.		100%	Valve(s) shall operate satisfactorily for test period of 5 minutes without sign of arc-back or sparking		
c*	Va for Ia = 10A (V)	Va (dc) applied for not more than two seconds, to give Ia = 10A. Test not to be repeated within one minute.		100%	-	13	3
d	BUMP	As described in section 4.9.19.3 of K1006 with hammer arm released from angle of 20°.	6.5	1c			1
	POST BUMP TESTS	Operation. As in test (b). Volts Drop. As in test (c).	6.5				
e	LIFE (Hrs)	Operate valve(s) in a rectifier circuit using 50 c/s ac with dc output current of 1.25A per valve, with peak anode current of 5A per valve, and with anode PIV of 13 kV.		TA	500	-	2

Amdt 1

NOTES

1. The valve shall be subjected to five blows in each of two mutually perpendicular directions before being submitted to the Post Bump Tests.

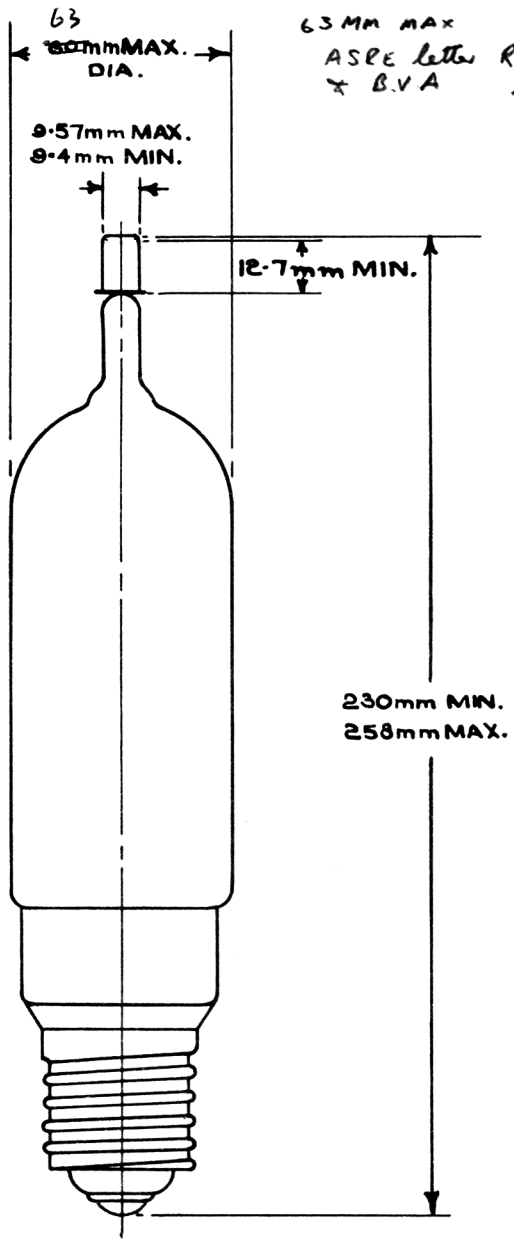
2. The life test end-point occurs when Va at Ia = 10A, with test conditions as in test (c), exceeds 20V. Amdt 1

* or MIL method ASR & Letter R22327/57/V 28/5/57 LBVA

Amdt 1 3. An approved pulse emission test may be used

CV2399.

Amdt 5-1



ELECTRONIC VALVE SPECIFICATIONS

SPECIFICATION AD/CV2399, ISSUE No.1 DATED 14th DECEMBER, 1956.
AMENDMENT No. 1

1. Page 2

(i) Test Clause 'C'. In the column headed 'Note' insert '3'.

(ii) Note 2. Amend 'exceed' to read 'exceeds'.

(iii) Note 3. Insert new Note 3 as follows:-

"3. An approved pulse **emission** test may be used".

2. Page 3. Outline Drawing. Amend "60 mm MAX. DIA." to read "63 mm MAX. DIA"

September, 1965. T.V.C. for A.S.W.E.

(319492)

15/11/65