Valve

UNCLASSIFIED

Page 1 (No. of pages: 4) MINISTRY OF SUPPLY (DCD)
Specification MAP/CV85/Issue 5 Dated 21.7.49.
To be read in conjunction with K1001, ignoring clauses: 5.2, 5.8.

PROTOTYPE:

RATING

Trigger Voltage

Min. Working Voltage

are matched.

В.

Peak Output Power

_	s. *	Indi	cates	8. (cnange
1	TYPE OF VALVE:	Enclosed trig	gered		
		spark gap.	1	- 1 -	1

Cold CATHODE: Glass-unmetallised: ENVELOPE:

protected (See

kV)

kv)

(low)

A. Under the following conditions: -

3.0

6.6

150

Note B).

V2023

Note

A

A

NOTES

Constant current charging is used and the load and line

Pulse Length

Main Gap Voltage = 7.2 kV.

The valve shall be provided with adequate splinter proofing.

MARKING

SECURITY

Contacts

3

T.C.

See K1001/4

CONNECTIONS

Anode

TOP CAP

See K1001/AI/D5.11

= 1.0 usec.

Repetition Frequency = 1200 per sec.

DIMENSIONS

See drawing on Page 4.

Ca thoda

BASE

Electrode

Trigger electrode

No connection

cv85/5/1

CL3

5. 2. RESTRICTED

Issue 5 Specification

CV85

To be performed in addition to those applicable in K1001.

	Test Conditions	Test	Li	nits	No.	No te		
	TOP 0 CONTOT OF OUR	7000	Min.	Max.	Tested			
	For the purpose of the following tests, all electrode potentials shall be measured with respect to the anode, which encloses the trigger rod.							
2	Cathode Veltage = -4.5 kV. max. Trigger circuit shall be derived from an approved pulse generator supplying a positive pulse of 9 kV. to 11 kV. on open circuit, at a repetition frequency of 1200 per sec. and with a build up time to max. voltage of 0.5 to 0.75 μsecs. The line shall be of 80Ω impedance and designed for a pulse length of 1 μsec. and shall be charged through a cheke of 180H. The external load shall be matched to the line.	A spark shall occur which also delivers power to the load circuit			100%			
þ	Cathode Voltage = 7.2 kV. Other test condi- tions as in 'a'	Trigger break- down voltage(kV)	-	6.0	100%			
C	Cathode Voltage = -6.6 kV. Other test condi- tions as in 'a'	1. Jitter in usecs. (total lateral movement of the trailing edge of the monitored pulse). 2. Fluctuations of amplitude		10%	100%			

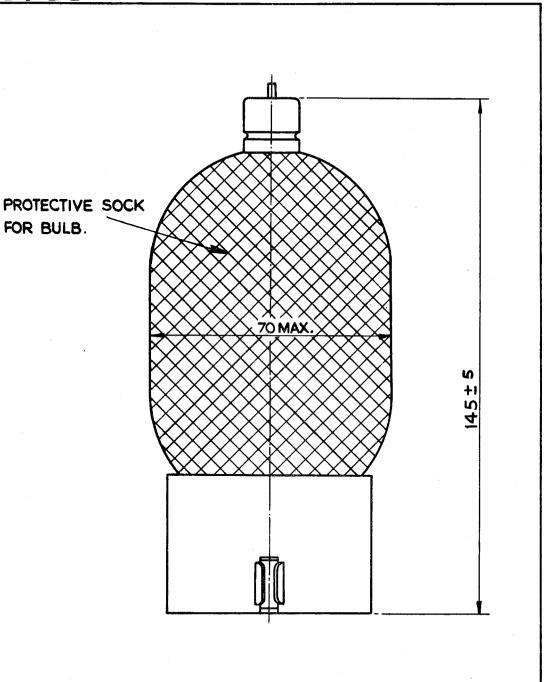
CV85

To be performed in addition to those applicable in K1001.

	Test Conditions	Test	Limits		No.	
			Min.	Max.	Tested	Note
đ	Cathode Voltage = -8.4 kV. Other test condi- tions as in 'a'	1. Jitter in usecs. (total lateral movement of the trailing edge of the monitored pulse). 2. Fluctuations of amplitude		0 . 2 − 1 0%	100%	
•	With the set up as in test 'a' the cathode voltage shall be increased until unstable operation occurs	Negative cath- ode voltage (kV) at which irre- gular breakdown (i.e. breakdown not correlated with the trigger pulse) occurs at a rate of between 1 & 6 times per sec.	9.0		100% or S	

NOTE

1. Test clause 'a' must be performed first in the test schedule.



DIMENSIONS IN M/M