VALVE ELECTRONIC CV6008

Specification MAP/CV6008/Issue 3 Dated 21.7.49. To be read in conjunction with K1001, ignoring clauses: 5.2, 5.8.	SECURITY	
	Specification	Valve
	RESTRICTED	UNCLASSIFIED

→ Indicates a change

TYPE OF VALVE: Enclosed triggered spark gap.

CATHODE: Cold

ENVELOPE: Glass-unmetallised protected (See Note B).

RATING

			Note
Trigger Voltage	(kV)	3.2	A
Min. Working Voltage	(kV)	6.8	A
Peak Output Power	(kW)	160	A

MARKING

See K1001/4

BASE

CL3

CONNECTIONS

Pin	Electrode
1	Trigger electrode
2	Anode
3	No connection
T.C.	Cathode

TOP CAP

See K1001/A1/D5.11

DIMENSIONS

See drawing on Page 4.

NOTES

A. Under the following conditions:-

Main Gap Voltage = 7.2 kV.
Pulse Length = 0.25 μsec.
Repetition Frequency = 2500 per sec.

Constant current charging is used and the load and line are matched.

B. The valve shall be provided with adequate splinter proofing.

To be performed in addition to those applicable in K1001.

	Test Conditions	Test	Limits Min.	Limits Max.	No. Tested	Note
For the purpose of the following tests, all electrode potentials shall be measured with respect to the anode, which encloses the trigger rod.						
a	Cathode Voltage = -4.5 kV. max. Trigger circuit shall be derived from an approved pulse generator supplying a positive pulse of 8.5kV ±10% on open circuit, at a repetition frequency of 2500 per sec. and with a build up time to max. voltage of 0.5-0.75 μsecs. The line shall be of 80Ω impedance and designed for a pulse length of 1/4 μsec. and shall be charged through a choke of 180H. The external load shall be matched to the line.	A spark shall occur which also delivers power to the load circuit.			100%	1
b	Cathode Voltage = -7.2 kV. Other test conditions as in 'a'	Trigger breakdown voltage(kV)	-	5.0	100%	
c	Cathode Voltage = -6.8 kV. Other test conditions as in 'a'	1. Jitter in μsecs. (total lateral movement of the trailing edge of the monitored pulse).	-	0.2	100%	
		2. Fluctuations of amplitude	-	±10%	100%	

TESTS (Cont'd.)

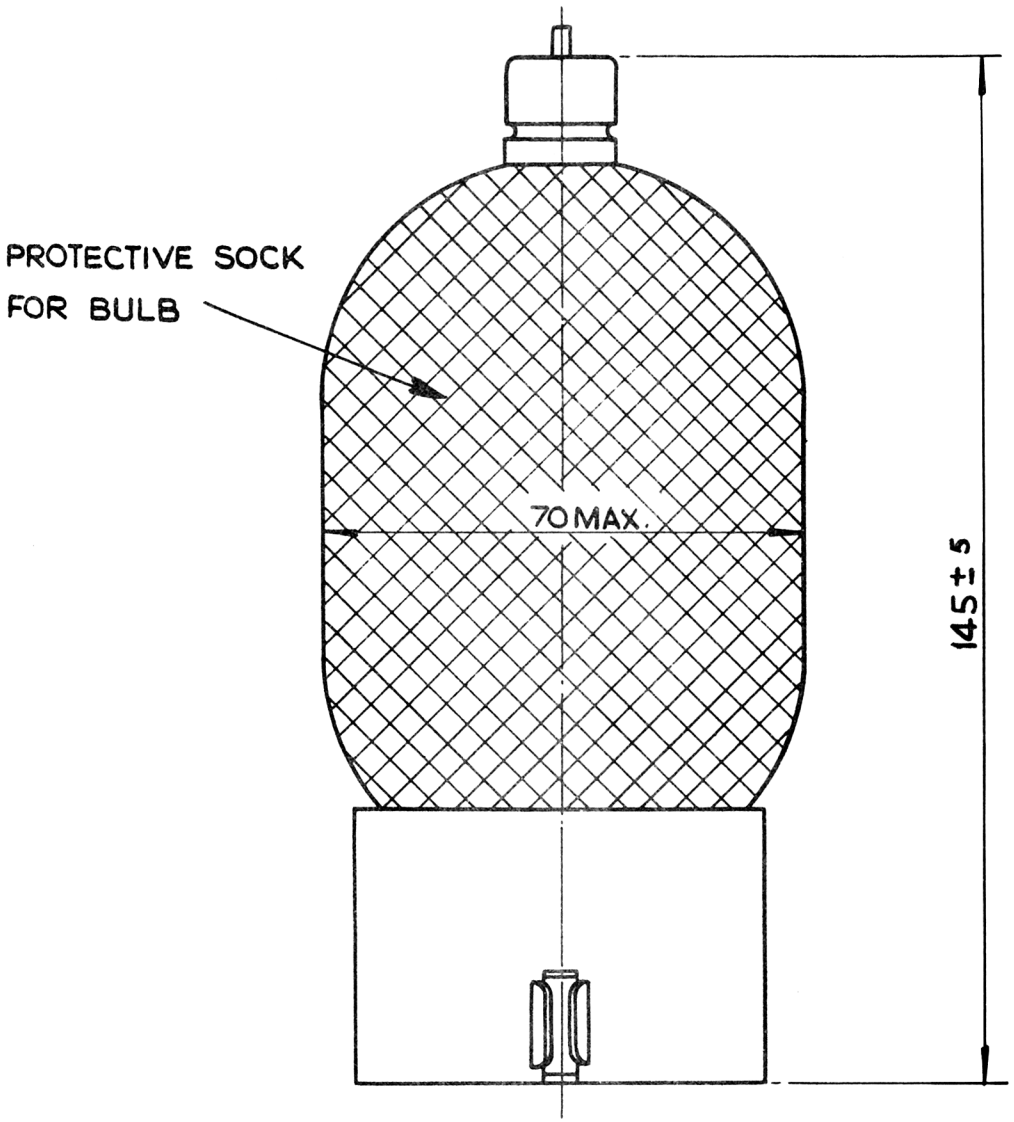
CV6008

To be performed in addition to those applicable in K1001.

	Test Conditions	Test	Limits Min.	Limits Max.	No. Tested	Note
d	Cathode Voltage = -8.4 kV. Other test conditions as in 'a'	1. Jitter in μsecs. (total lateral movement of the trailing edge of the monitored pulse).	-	0.2	100%	
		2. Fluctuations of amplitude	-	±10%	100%	
e	With the set up as in test 'a' the cathode voltage shall be increased until unstable operation occurs	Negative cathode voltage(kV) at which irregular breakdown (i.e. breakdown not correlated with the trigger pulse) occurs at a rate of between 1 & 6 times per sec.	10.5	-	100% or S	

NOTE

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



DIMENSIONS IN M/M