MINISTRY OF SUPPLY - D.L.R.D. (A)/R.A.E.

VALVE ELECTRONIC **CV338**

Specification MOSA/CV338 Issue 5 Dated 17.11.53 To be read in conjunction with K.1001	SECURITY Specification: UNCLASSIFIED Valve: UNCLASSIFIED

→ Indicates a change

TYPE OF VALVE - Full wave gas filled rectifier

ENVELOPE - Glass, unmetallised

CATHODE - Indirectly heated

PROTOTYPE - VX 3001

MARKING

See K.1001/4

BASE

B9G

RATING			Note
Heater Voltage	(V)	5	
Heater Current	(A)	2.3	
Max. R.M.S. Input Voltage	(V)	500	
Max. Working P.I.V.	(kV)	1.3	
Max. No Load P.I.V.	(kV)	1.4	
Max. D.C. Output Current	(mA)	250	
Max. Peak Anode Current	(mA)	850	
Max. Reservoir Condenser	(μF)	16	
Max. Limiting Impedance	(Ω)	150	

(Ratings apply to condenser input filter and 50 c/s supply)

CONNECTIONS

Pin	Electrode
1	Heater
2	Anode
3	Shield
4	Shield
5	Heater and Cathode
6	Shield
7	Shield
8	Anode
9	Heater and Cathode

DIMENSIONS

See K.1001/A1/D2 except

Dimension	Min.	Max.
E(mm)	53.5	60

NOTES

A. The sole plate and skirt of the valve must be connected either to cathode or to earth. The ratings are unaffected by the alternative connections.

B. Heater Voltage must be applied at least 45 seconds before the anode voltage, and 2 minutes before commencing tests.

CV338

TESTS

To be performed in addition to those applicable in K1001

	Test Conditions			Test	Limits Min.	Limits Max.	No. Tested	Note
	Vh	Va	Ia					
a	5.0 AC or DC	0	0	Ih (A)	2.1	2.5	100% or S	
b	5.0 AC or DC	Vary	-	Striking Voltage (V)	-	12	100%	1,2, 3,4.
c	5.0 AC or DC	-	220 mA (per anode)	Arc Drop (V)	-	8	100%	1,2, 4,5.
d	5.0 A.C.	Input voltage 500-0-500 R.M.S. Frequency 50cps. D.C. Load current 250mA. Reservoir Condenser 8μF. Effective impedance in series with each anode 150 Ω		Load Test Output Voltage (V) Run one minute reject for persistent flashover	540	-	100%	1

NOTES

1. Heater voltage must be applied at least 45 seconds before the anode voltage, and 2 mins. before commencing tests.
2. Test to be applied to each anode.
3. Anode voltage must be increased slowly from zero.
4. A series resistance of 250Ω shall be used to limit the current.
5. Anode Current to be read on M2; Input per anode 250V to be read on M3; Arc Drop to be read on M1. (see circuit below)