

MINISTRY OF SUPPLY - DLRD(A)/TRE

Specification MOS(A)/CV404 Issue 2 Dated 11.11.52 To be read in conjunction with K1001 excluding clauses 5.2, 5.8.	<u>SECURITY</u>	
	<u>Specification</u> UNCLASSIFIED	<u>Valve</u> UNCLASSIFIED

→ Indicates a change

<u>TYPE OF VALVE</u> - High Vacuum Half-wave Rectifier				<u>MARKING</u>	
<u>CATHODE</u> - Indirectly-heated				See K1001/4.	
<u>ENVELOPE</u> - Glass - unmetallised					
<u>PROTOTYPE</u> - VX9038				<u>BASE</u>	
				IO	
<u>RATINGS</u>				<u>CONNECTIONS</u>	
			Note		
Heater Voltage	(V)	4.0		<u>CONNECTIONS</u>	
Heater Current	(A)	1.25		Pin	Electrode
<u>RATING (a)</u>					
Max. RMS Anode Voltage	(kV)	6.0	A	1	No connection
Max. Working PIV	(kV)	15.0	A	2	Heater
Max. No Load PIV	(kV)	16.5	A	3	No connection
Max. DC Rectified Current	(mA)	40	A	4	No connection
Max. Peak Anode Current	(mA)	300	A	5	No connection
Max. Reservoir Condenser	(μ F)	1.0	A	6	No connection
Min. HT Switching Delay Period for Full Rating	(secs)	60		7	No connection
Min. Limiting Resistance introduced externally	(ohms)	5000		8	Heater and Cathode
<u>RATING (b)</u>				TC	Anode
Max. RMS Anode Voltage	(kV)	5.0	A	<u>TOP CAP</u>	
Max. Working PIV	(kV)	12.5	A	See K1001/A1/D5.2	
Max. No Load PIV	(kV)	14.0	A	<u>DIMENSIONS</u>	
Max. DC Rectified Current	(mA)	50	A	See K1001/A1/D1	
Max. Peak Anode Current	(mA)	350	A	Dimension	Min.
Max. Reservoir Condenser	(μ F)	1.0	A	Max.	
Min. HT Switching Delay Period for Full Rating	(secs)	60		A (mm)	105
Min. Limiting Resistance introduced externally	(ohms)	4000		B (mm)	34

NOTES

- A. Absolute maximum value.
 B. Ratings apply to condenser input filter and 50 cps.
 C. Ratings (a) and (b) are alternatives and must not be interchanged under any circumstances.

CV404/2/1

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	4.0 AC or DC	0	0	Ih (A)	1.12	1.38	100% or S
b	4.0 AC or DC	-	120	Va (V)	-	120	100%
c	4.0 AC	Input Voltage 5 kV RMS; Frequency 50 cps; DC Load Current 50 mA (nom); Reservoir Condenser 1 μ F; Effective Resistance introduced externally = 4000 ohms.	Load Test Run 40 secs. After first 10 secs switch AC HT supply 3 times - 5 secs off and 5 secs on. Reject for softness or persistent flash-over.				100%
d	4.0 AC	As Test (c) above but Input Voltage = 6 kV RMS; DC Load Current = 40 mA; Reservoir Condenser = 1.0 μ F. Effective Resistance introduced externally = 5000 ohms.	Load Test As for Test (c) above.				100%