

VALVE ELECTRONIC

CV 2276

Department of Atomic Energy - A.E.R.E.

Specification D.At.En./CV.2276 Issue 2 Dated 25.2.54. To be read in conjunction with K.1001	<u>SECURITY</u>	
	<u>Specification</u> UNCLASSIFIED	<u>Valve</u> UNCLASSIFIED

→ Indicates a change.

TYPE OF VALVE - Single stage, thermionic, electron multiplier.		<u>MARKING</u> See K1001	
CATHODE - Indirectly heated.		<u>BASE</u> B9A	
ENVELOPE - Glass.		<u>CONNECTIONS</u>	
PROTOTYPE - VX.5038, E.2133.		Pin	Electrode
<u>RATING</u>		<u>DIMENSIONS</u>	
	Note	Dimensions	Min. Max.
Heater Voltage (V) 6.3		1	G ₃ and I.S.
Heater Current (A) 0.3		2	G ₁
Max. anode voltage I _a =0 (V) 600		3	K ₁
Max. operating anode voltage (V) 500		4	H
Max. secondary cathode voltage I _a =0 (V) 500		5	H
Max. operating secondary cathode voltage I _a =0 (V) 500		6	G ₃ and I.S.
Max. screen voltage I _a =0 (V) 400		7	A
Max. operating screen voltage (V) 300		8	K ₂
Max. anode dissipation (W) 2	A	9	G ₂
Max. secondary cathode dissipation (W) 2.0	B		
Max. screen dissipation (W) 0.8	C		
Mutual conductance (mA/V) 19			
<u>CAPACITANCES (pF)</u>			
C _{ae}	3.0		
C _{g1e}	8.0		
C _{k2e}	3.0		
C _{ag1}	.005		
<u>NOTES</u>			
A. Measured by $W_a = I_a (V_a - V_{k2})$			
B. Measured by $W_{k2} = V_{k2} (I_{k1} - I_{g2})$			
C. Measured at $V_{g2} = V_{k2} = 250\text{-V.}$, $V_a = 350\text{-V.}$, $I_a = 15\text{ mA.}$			

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<u>TESTS</u>													
Test Conditions							Test	Limits		No. Tested	Note		
								Min.	Max.				
V_h	V_a	V_{k2}	V_{g2}	V_{g1}	I_a								
a							<u>Capacitances (pF)</u>				6 per week		
							C_{ae}	2.5	3.5				
							C_{ge}	7.0	9.0				
									C_{k2e}	2.5	3.5		
						C_{g1}		.01		Type approval			
b	6.3	0	0	0	0	0	I_h (A)	0.275	0.325	100%			
c	6.3	350	250	250	Adj.	15	V_{g1} (V)	-1.1	-2.4	100%			
d	6.3	350	250	250	"	15	I_{k2} (mA)	-8	-11	100%			
e	6.3	350	250	250	"	15	Reverse I_{g1} (μ A)	-	0.5	100%			
f	6.3	350	250	250	"	15	g_m (mA/V)	15	23	100%	1		
g	6.3	350	250	250	"	15	I_{g2} (mA)	0.9	1.5	100%			
h	6.3	350	250	250	"	0.1	V_{g1} (V)	-	-7.0	100%			
i	6.3	Ad-just	250	250	"	-	Change in I_a (mA)	-	2	100%	2		
<u>NOTES</u>													
1. For a max. change in V_{g1} of ± 0.1 V.													
2. V_{g1} shall be adjusted so that $I_a = 15$ mA with $V_a = 350$ V. V_a is then changed from 325 V to 375 V and the total change of I_a noted.													
3. A warming up period of 5 minutes should be allowed before tests c to i are applied.													