

VALVE ELECTRONIC CV1928

GENERAL POST OFFICE: E-IN-C (S)

Specification: GPO/CV1928/Issue 1

Dated: November, 1952.

To be read in conjunction with K 1001

SECURITY

Specification

Valve

UNCLASSIFIED

UNCLASSIFIED

-----> indicates a change

<u>TYPE OF VALVE:</u> - Var. μ RF Pentode			<u>MARKING</u> See K1001/4		
<u>CATHODE:</u> - Indirectly Heated					
<u>ENVELOPE:</u> - Glass, unmetallised					
<u>PROTOTYPE</u> - 12BA 6					
<u>RATING</u>			Note		<u>BASE</u> B7G
Heater Voltage (V) 12.6			C C C C C A A A	<u>CONNECTIONS</u>	
Heater Current (A) 0.15				Pin	Electrode
Max. Anode Voltage (V) 330				1	G1
Max. Screen Grid Voltage (V) 135				2	G3
Max. Screen Grid Supply Voltage (V) 330				3	H
Max. Anode Dissipation (W) 3.3				4	H
Max. Screen Grid Dissipation (W) 0.7				5	A
Mutual Conductance (mA/V) 4.4				6	G2
Anode Impedance (Megohms) 1.5				7	C
Max. Mutual Conductance at $V_{g1} = -20V$ ($\mu A/V$) 100					
			<u>DIMENSIONS</u> See K1001/A1/D4		
<u>Capacitance (pF)</u>			<u>Dimension</u> <u>Min.</u> <u>Max.</u>		
Cg1 - a (max.) .0035			A mm	-	54.01
Cg1 - e 5.5			B mm	-	19.05
Ca - e 5.0			L mm	-	47.75
			F mm	34.04	42.16
<u>NOTES</u>					
A. Measured at: $V_a = 250V$; $V_{g2} = 100V$; $V_{g3} = 0$; $R_c = 68 \text{ ohms}$; $I_a = 11 \text{ mA}$; $I_{g2} = 4.2 \text{ mA}$.					
B. Measured with close fitting metal screen					
C. Absolute maximum values.					

To be performed in addition to those applicable in K1001

Test Conditions							Test	Limits		No. Tested	Note	
								Min.	Max.			
	See K1001/AIII						<u>CAPACITANCES (pF)</u>					
a	Links to H.P.		Links to L.P.		Links to E.							
	1		5		2,3,4,6,7, 8,9,10 TC.1 TC.2		Cg1a			.0035	T.A.	1
	1		2,3,4,6,7, 8,9.		5,10,TC.1 TC.2		Cg1e		4.4	6.4	6 per week	
	5		2,3,4,6, 7,8,9.		1,10,TC.1 TC.2		Cae		3.5	6.5		
	V _h (V)	V _a (V)	V _{g2} (V)	V _{g3} (V)	R _c (ohms)	V _{g1} (V)					100% or S	
b	12.6	0	0	0	-	0	I _h (A)		.138	.162		
c	12.6	250	100	0	68	-	I _a (mA)		8.5	13.5	100%	
d	12.6	250	100	0	68	-	I _{g2} (mA)		2.8	5.6	100% or S	
e	12.6	250	100	0	-	-1.5	Reverse I _{g1} (μA)		-	1.0	100%	
f	12.6	250	100	0	68	-	g _m (mA/V)		3.6	5.2	100%	2
g	12.6	250	100	0	-	-20	g _m (μA/V)		5	100	100% or S	
h	12.6	20	20	20	0	20	Emission (mA)		60	-	100%	

NOTE

1. Measured with a close fitting metal screen.
2. Cathode resistor to be by-passed by 1000 μF condenser.
3. Reference point for all potentials except heater and suppressor shall be the negative terminal of the cathode resistor.