VAIWE ELECTRONIC

ADMIRALTY SURFACE WEAPONS ESTABLISHMENT

CV5343

Specification AD/CV5343	SECURITY
Issue 1, Dated 17.11.60.	Specification Valve Unclassified Unclassified
To be read in conjunction with K1001	onclassified owners in the

	TYPE OF VALVE - Transm Pulse CATHODE - Direct ENVELOPE - Glass PROTOTYPE - CV2131		<u>MARKING</u> See K1001/4 <u>BASE</u> B.S.448/B5F						
	(All limiting va	Note	<u>CONNECTIONS</u>						
	Filament Voltage		(v)	5+0.5 -0		Pin	Electrode		
fandt 1	Filament Current Max. Anode Voltage Max. Screen Voltage Max. Anode Dissipatio Max. Screen Dissipatio Max. Control Grid Dis Max. D.C. Negative Con Grid Voltage	on Sipation	(A) (kV) (V) (W) (W) (V)	14.1 9.0 1000 250 250 353 10 500	c	1 2 3 4 5 T.C.	f g2 g1 g2 f a		
	Max. D.C. Anode Curre Mutual Conductance Inner Amplification F Max. Anode Top Cap Temperature		(mA) (mA/V) (ug1,g2)	350 4.0 5.25 170°0	C A				
	(All limiting va	Pu	absolute lse Lengt	h	Note	<u>DIMENSIONS</u> See Drawing on Page 4			
	Max. Pulse Anode Current (A) Max. Peak Cathode Current (A) Max. Pulse Anode (KW) Max. Pulse Screen Grid Dissipation (W) Max. Pulse Control Grid Dissipation (W)	_	0.6 6.0 5.0 500 150	0.42 4.0 0.5 50 20	В				
	CAP	MOUNTING POSITION							
	C in (nom.) 12.6 C out (nom.) 4.4 Ca, g1(max.) 0.14					Vertical,	base up or down		

z.21652.

CV5343/1/1

NOTES

- A. The temperature of the anode seal shall not exceed 170°C. The base seals shall be cooled by the circulation of at least 2 cubic feet of air per minute.
- B. The values of peak cathode current apply to pulse operation at frequencies above 15 kc/s.
- C. The Joint Services Catalogue Number is 5960-99-037-2315

CV5343/1/2

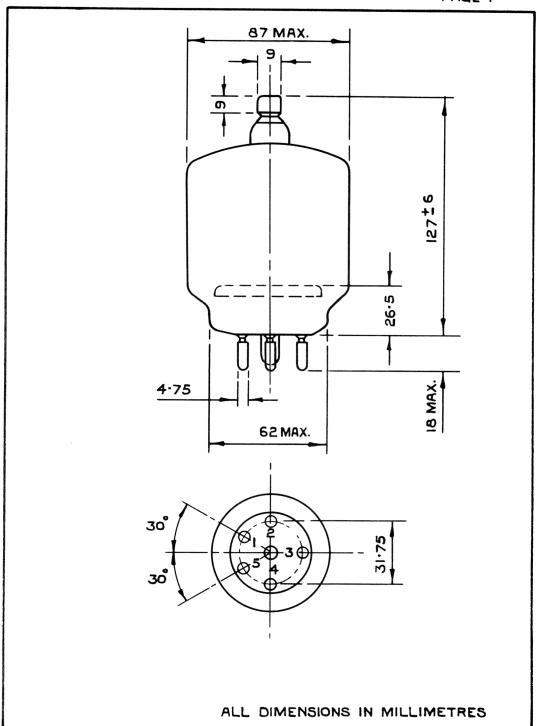
To be performed in addition to those applicable in K.1001

			Te	st (Conc	litio	ns	Test			Lim	its	No. Tested	Note
											Min.	Max.	108100	
		See K.1001/AIII												
	Link H.	s to	Li	nks L.P.		L	inks to	CAPACITANCES (pF)				41.50	6	
	3		1,	2,4,	,5		7,8,9,10 C.1,T.C.2	C in			10.70	14.50	per week	
а	T.C.	1	1,	2,4,	,5		6,7,8,9, ,T.C.2	C out		3.70	5.10	-		
	т.с.	1		7,			2,4,5,6, 8,9,10, C.2	Ca, gf	ı		-	0.14	T.A.	
	۷f	Va(k	v)	Vg2	1	/g1	Ia(mA)						100%	
Ъ	5.0	0		0	0		0	If		(A)	13.5	14.7	or S	
С	6.0		See Note 1					gi Pri Emi	mary ssion	(/uA)	-	500	100%	1
đ	6.0	See	Not	e 2	2 0		-	g2 Pri	mary sion	(n a)	-	500	100%	2
e	5.0	2.5	50	ю	Adjust		100	Vg1		(v)	- 65	- 95	100%	
r	5.0	2.5	50	ю	Adjust		100	Ig1	(/u ≜)	-	10	100%	
g	5•0	-	50	0	Ad	Just	-	/ug1, g	3 2		4•5	6.0	20 p er week	3
h	5.0	Ano	Anode, g2 and g1 strapped with 2.5 kV Peak applied				Peak	Emiss	ion (A)	8.0	-	100%		
j	5.0	5.0	60	0	2	275 te \$	166	Power Ig2	Outpu	t (W) (mA)	500 -	- 400 60	6 per week	4

NOTES

- (1) With anode and g2 floating, the 50 c/s A.C. volts applied to g1 through suitable rectifiers, shall be adjusted to heat the grid during the (+) we half cycles and give a mean Ig1 = 200 mA D.C. The grid emission shall be measured during (-)ve half cycles. Test duration to be 15 seconds minimum.
- (2) With anode floating, the 50 c/s A.C. volts applied to g2 through suitable rectifiers shall be adjusted to heat the grid during the (+)ve half cycles and give a mean Ig2 = 170 mA D.C. The grid emission shall be measured during (-) ve half cycles. Test duration to be 15 seconds minimum.
- (3) Anode earthed, Vg1 adjusted to give: Ig2 = 70 mA.
- (4) This is a neif oscillating condition the power oscillation left frequency to be not less than 15 MHz
 (4) Under the conditions of test 1 there shall be no aroing, flashovers etc.
 during the 15 minute test period. The self-oscillating condition shall be maintained for 15 minutes during which time no aring or flanhover shall occur.

(5) For correct conditions of self-oscillation the grid bias voltage shall be approximably -275 volt. This may be obtained by a suitable value of Rg, or by a combination Anti of both fixed and self bies - Is, shall not exceed 25 ml



ELECTRONIC VALVE SPECIFICATION S SPECIFICATION AD/CV5343, ISSUE 1 DATED 17.11.60 AMENDMENT NO. 1

1. Page 1

Under RATINGS, amend the Max. Screen Grid Dissipation from 35W to 36W.

2. Page 3

a. Test j

- (1) In the Test Condition Column under V_{g_1} delete "-275" and insert "NOTE 5"
- (2) In the Limits (max.) Column amend the limit for Ig₂ from 100 mA to 60 mA.

b. NOTES

- (1) Delete the existing text of NOTE 4 and substitute the following:-
 - "This is a self-oscillating condition the power oscillation test frequency to be not less than 15 MHz. The self-oscillating condition shall be maintained for 15 minutes during which time no arcing or flashover shall occur".
- (2) Insert a new NOTE 5 as follows:-
 - "For correct conditions of self-oscillation the grid bias voltage shall be approximately -275 volts. This may be obtained by a suitable value of Rg, or by a combination of both fixed and self bias Ig, shall not exceed 25 mA".