 VALVE ELECTRONIC

ADMIRALTY SIGNAL AND RADAR ESTABLISHMENT

ASWE

CV2984

Specification AD/CV2984 incorporating MIL-E-1/209 Issue 1 Dated 25.9.58 To be read in conjunction with K1006.	SECURITY Specification: Unclassified Valve: Unclassified

TYPE OF VALVE - DOUBLE TRIODE
CATHODE - INDIRECTLY HEATED
ENVELOPE - GLASS
PROTOTYPE - 6080

MARKING
K1001/4
Additional Marking
6080

RATING

(All limiting values are absolute)

			Note
Heater Voltage	(V)	6.3	
Heater Current	(A)	2.5	
Max. D.C. Supply Voltage	(V)	250	
Max. D.C. Anode Current	(mA)	125	A
Max. Anode Dissipation	(W)	13	A
Max. Heater-cathode Voltage	(V)	300	
Amplification Factor		2.0	A, B
Mutual Conductance	(mA/V)	7.0	A, B
Max. Grid Resistance	(MΩ)	1.0	C
Max. Bulb Temperature	(C^{o})	200	
Max. Altitude	(ft)	10,000	

BASE

Large wafer octal with metal sleeve.
See K1001/A1V/D2
M Dimension (vi) applies

CONNECTIONS

Pin	Electrode	
1.	Grid 2	g_2
2.	Anode 2	a_2
3.	Cathode 2	k_2
4.	Grid 1	g_1
5.	Anode 1	a_1
6.	Cathode 1	k_1
7.	Heater	h
8.	Heater	h

DIMENSIONS (ins.)

	Min.	Max.
Height	-	4¼
Diameter	-	1-23/32

MOUNTING POSITION

Any

NOTES

A. Each section.
B. Measured at V_a = 135V, R_k = 250Ω.
C. For cathode bias operation. 0.1MΩ (Max.) for fixed bias operation

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JAN-6080

Ratings:	Ef V	Eb Vdc	Ec Vdc	Ip/p mAdc	Pp/p W	Ehk V	R1g R2g Meg	R1k R2k ohms	T Bulb °C	Alt.
Absolute Maximum:	6.3±10%	250	---	125	13	±300	Note 1	Note 1	200	10,000
Test Cond.:	6.3	135	0	---	---	---	---	250	---	

*Height: 4 1/4 in. Max. *Diameter: 1 23/32 in. Max.

**Base: Large Wafer Octal With Metal Sleeve, B8-32

**Pin No.:	1	2	3	4	5	6	7	8
Element:	2g	2p	2k	1g	1p	1k	h	h

**Cathode: Coated Unipotential

**Envelope: T-12 (6-1)

Ref.	Test	Conditions		Min	Max
3.1	Qualification Approval:	Required for JAN Marking			
4.9.18.1.1	Carton Drop:	(d) Package Group 1; Carton Size F			
4.9.20.4	*Vibration:	Rp=2000 ohms; Ec= -7Vdc; Note 2	Ep:	---	200 mVac
4.10.8	*Heater Current:		If:	2.26	2.74 A
4.10.15	*Heater-Cathode: Leakage:	Ehk=±100 Vdc	Ihk:	0	50 uAdc
4.8	Insulation of Electrodes:	Ef=6.3V			
4.10.6.1	†Grid Current:	Rg=1.0 Meg; Note 3	Ic:	0	-5.0 uAdc
4.10.4.1	Plate Current(1):	Note 4	Ib:	100	150 mAdc
4.10.4.1	Plate Current(2):	Eb=250Vdc; Ec=-200Vdc; Note 4	Ib:	---	10 mAdc
4.10.9	Transconductance(1):	Note 4; Note 6	Sm:	5800	8200umhos
4.10.9	*Transconductance(2):	Ef=5.7V; Note 4; Note 6	Sm:	5300	---umhos
4.10.1.1	Emission:	Eb=Ec=15Vdc; Rk=0; Note 5	Is:	110	--- mAdc
4.11	Life Test:	Group A; Ehk=±300Vdc; Rk=125ohms; Rg=1.0 Meg; Note 2	t:	500	---hrs.
4.11.4	Life Test End Point:	Transconductance(1)	Sm:	4900	---umhos

Note 1: Maximum Circuit Values:
Grid Current Resistance
For cathode-bias operation 1.0 Meg. Max.
For fixed-bias operation * 0.1 Meg. Max.
For combined fixed and cathode-bias operation # 0.1 Meg. Max.

APPROVED 20 May 1953 REVISED

CUSTODIANS:
Army-Signal Corps
Navy-Bureau of Ships
Air Force

PROCUREMENT SPECIFICATION

SPECIFICATION SHEET

LOW MU TWIN TRIODE, RECEIVING 6080

MIL-E-1/209

SHEET 1 OF 2

Other interest: Army - CMOT Navy - AM:MdOrs

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* When fixed bias is used, the plate circuit should contain a protective resistance to provide a minimum drop of 15 Vdc at the normal operating conditions.

\# When combined fixed and cathode-bias is used, the cathode-bias portion should have a minimum value of 7.5 Vdc at the normal operating conditions.

Note 2: Tie 1p to 2p, 1g to 2g, and 1k to 2k.

Note 3: With both units operating, Ic is the sum of I1c and I2c.

Note 4: With both units operating, read each unit separately.

Note 5: Read each unit separately. Ground unit not under test.

Note 6: Rk by-passed with 1000 uf capacitor.

Note 7: Reference specification shall be of the issue in effect on the date of invitation for bids.

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