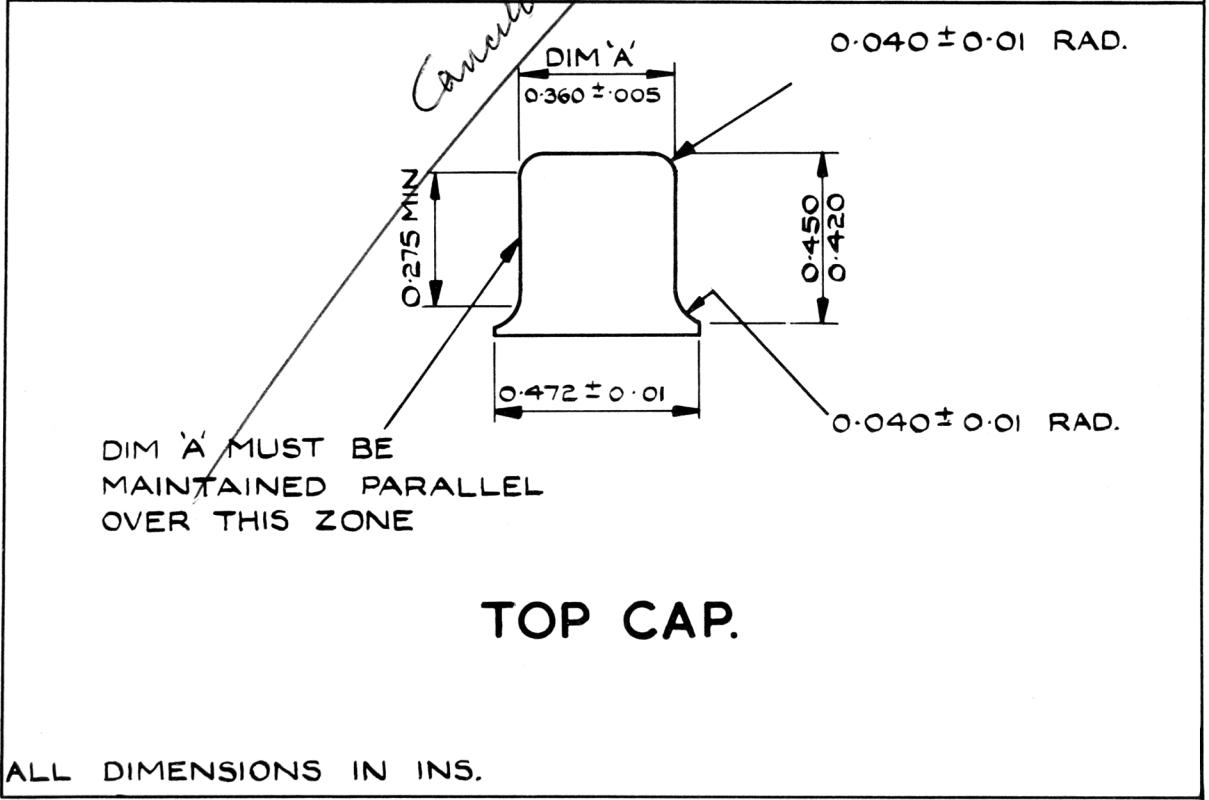
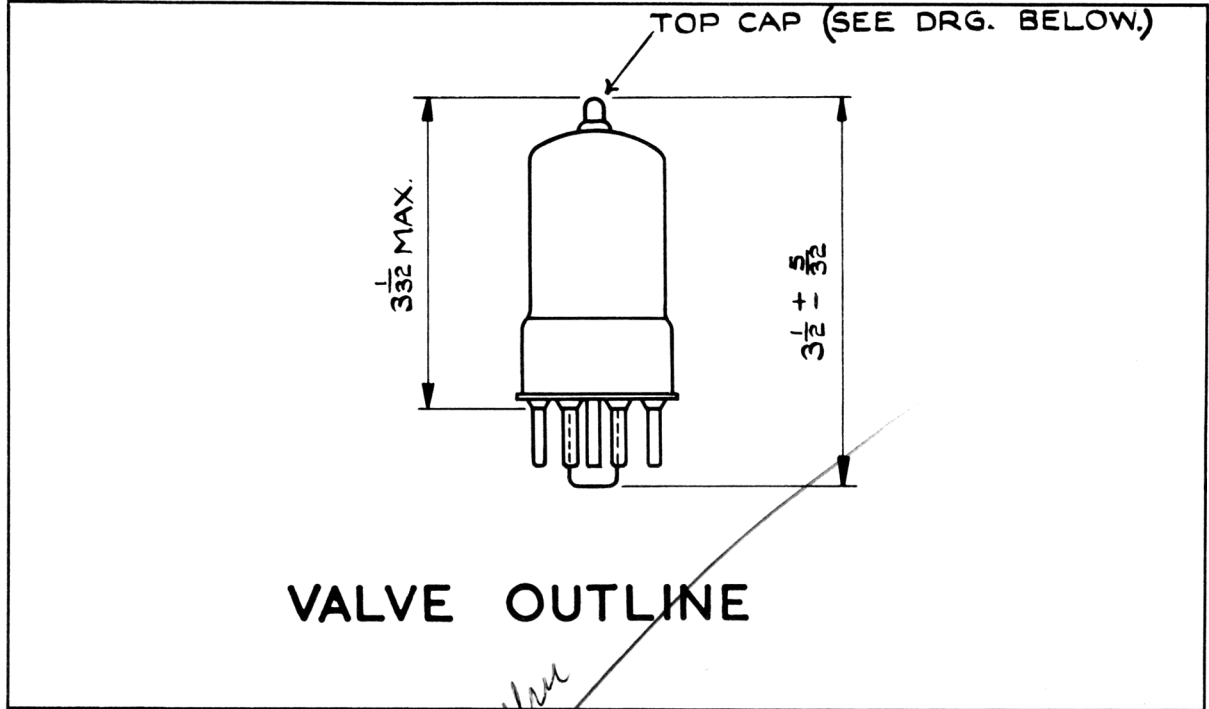


MINISTRY OF AVIATION, D.L.R.D./R.A.E.

SPECIFICATION M.O.A./CV.3990 incorporating MIL-E-1/338B ISSUE 1A DATED 2.7.62 To be read in conjunction with K1006, K1001, BS.448 and BS.1409	<table border="1"> <tr> <th colspan="2">SECURITY</th></tr> <tr> <th>SPECIFICATION</th><th>VALVE</th></tr> <tr> <td>Unclassified</td><td>Unclassified</td></tr> </table>	SECURITY		SPECIFICATION	VALVE	Unclassified	Unclassified
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TYPE OF VALVE: Beam Power Amplifier CATHODE: Indirectly heated ENVELOPE: Glass PROTOTYPE: 2E26	<table border="1"> <tr> <th colspan="2">MARKING</th></tr> <tr> <td colspan="2">See K1001/4</td></tr> <tr> <th colspan="2">BASE</th></tr> <tr> <td colspan="2">K1006/B8-26. Small wafer octal 8-pin with sleeve, Phenolic.</td></tr> </table>	MARKING		See K1001/4		BASE		K1006/B8-26. Small wafer octal 8-pin with sleeve, Phenolic.																																																																																											
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CV 3990

MIL-E-1/338B
14 May 1956
SUPERSEDING
MIL-E-1/338A
3 May 1954

INDIVIDUAL MILITARY SPECIFICATION SHEET

ELECTRON TUBE, TRANSMITTING, BEAM POWER AMPLIFIER

JAN-2E26

This specification sheet forms a part of the latest issue of Military Specification MIL-E-1.

F1=125Mc
F2=175Mc

Ratings	Ef	Eb	Ec1	Ec2	Ib	Ic1	Pp	Pg2	Pi	Ehk	Modu-	Alt
Absolute	V	Vdc	Vdc	Vdc	mAdc	mAdc	W	W	W	V	lation	ft
Maximum												
A. Audio	6.3/10%	300	---	200	---	---	10	2.5	---	100	---	10,000
AB2 Audio	6.3/10%	400	---	200	75	---	10	2.5	30	100	---	10,000
C Teleg	6.3/10%	400	-175	200	60	3.5	6.7	1.7	20	100	Plate	10,000
C Teleg	6.3/10%	500	-175	200	75	3.5	10	2.5	30	100	---	10,000
Test Cond	6.3	---	---	---	---	---	---	---	---	---	---	---

**Cathode	Coated Unipotential						*Height: 3-11/32 in. min.; 3-21/32 in. max.					
**Base	Small-Wafer Octal 8-Pin with Sleeve, B8-26, Phenolic						**Diameter: 1-5/16 in. maximum					
**Pin No.:	1	2	3	4	5	6	7	8	Cap	**Cap: Small, C1-1		
Element:	k, g3	h	g2	k, g3	gl	k, g3	h	Base	p	**Envelope: T-8		
	int. sd			int. sd		int. sd		sleeve				

The following tests shall be performed:

For miscellaneous requirements, see Paragraph 3.3, Inspection Instructions for Electron Tubes.

For unclassified requirements, see Paragraph 6.2, Inspection Instructions for Electron Tubes.												
Ref.	Test	Conditions	AQL(%)	Insp. Level or Code	Sym.	LIMITS						Units
						Min.	LAL	Bogie	UAL	Max.	ALD	
	<u>Qualification Approval Tests</u>											
3.1	Qualification Approval:	Required for JAN Marking	---	---								
---	Cathode:	Coated Unipotential	---	---								
3.4.3	Base Connections:		---	---								
4.10.2.2	Power Oscillation (2):	Eb=400Vdc; Vary Eb; Ec1=50Vdc; Ic1=2mA dc; Ib=75mA dc; F=125Mc; Rg1=25000			Po:	16	---	---	---	---	---	W
	<u>Measurements Acceptance Tests, Part 1: Note 1</u>											
4.10.6.1	†Grid Current:	Eb=500Vdc; Ec2=200Vdc; Ec1/Ib=20mA dc	0.65	II	Ic1:	---	---	---	---	-3.0	---	uAdc
4.10.4.1	Plate Current:	Eb=200Vdc; Ec2=135Vdc; Ec1=-10Vdc	0.65	II	Ib:	23	---	---	---	47	---	mA dc
4.10.4.3	Screen-Grid Current:	Eb=200Vdc; Ec2=135Vdc; Ec1=-10Vdc	0.65	II	Ic2:	---	---	---	---	4	---	mA dc
4.10.1.1	†Emission:	Eb=Ec1=Ec2=25Vdc	0.65	II	Is:	130	---	---	---	---	---	mA dc
4.9.1	Mechanical:											
	<u>Measurements Acceptance Tests, Part 2</u>											
4.9.10.1	Vibration:	Eb=250Vdc; Ec2=200Vdc; Ec1/Ib=10mA dc; Rp=2000	6.5	IA	Ep:	---	---	---	---	500	---	mVac
4.10.8	Heater Current:		6.5	IA	If:	740	---	---	---	860	---	mA
4.10.15	Heater-Cathode Leakage:		6.5	IA	Ihk:	---	---	---	---	50	---	uAdc
4.10.2.2	Power Oscillation(1):	Eb=500Vdc; Ec2=200Vdc; Ib=60mA dc; Ic1=2mA dc; Rg1=15,000; F=15Mc	6.5	IA	Po:	18	---	---	---	---	---	W

CV3990

Ref.	Test	Conditions	AQL(%)	Insp. Level or Code	Sym.	LIMITS						Units
						Min.	LAL	Bogie	UAL	Max.	ALD	
	<u>Measurements Acceptance Tests, Part 2</u> (contd)											
4.10.3.4	Transmitting Tube Noise:	Eb=250Vdc;Ec2=125Vdc;Ec1/Ib=2mAdc	---	---	---	---	---	---	---	---	---	---
4.10.14	Capacitance:	No Shield; Note 2 No Shield; Note 2 No Shield; Note 2	6.5	IA	Cgp: Cin: Cout:	--- 10.8 5.4	--- --- ---	--- --- ---	--- --- ---	0.2 15.2 8.6	--- --- ---	uuf uuf uuf
Ref.	Test	Conditions	AQL(%)	Insp. Level or Code	Allowable Defectives per Characteristic		Sym.	LIMITS		Units		
					1st Sample	Combined Samples		Min.	Max.			
	<u>Acceptance Life Tests</u>											
4.11	Life Test:	Group C;Eb=500Vdc;Ec2=200Vdc;Ec1/Ib=20mAdc					t:	500	---	hours		
4.11.4	Life Test End Point:	Emission					Is:	100	---	mAdc		
	<u>Packaging Requirements</u>											
4.9.18.1.7	Container Drop:	(d) Package Group 1; Container Size E										

Note 1: The AQL for the combined defectives for attributes in Measurements Acceptance Tests, Part 1, excluding Mechanical, shall be one percent. A tube having one or more defects shall be counted as one defective. MIL-STD-105, Inspection Level II, shall apply.

Note 2: Base Sleeve tied to cathode.

Note 3: Reference specification shall be of the issue in effect on the date of invitation for bid.

*Cancelled
to be removed*

NOTE

Specification CV.3990
Issue 1A. This
specification consists
of Sheets A & B enclosed
herewith together with
pages 1 & 2 of Issue 1
which must be retained.

T.V.C.