

CV 1763.

Specification M.O.A./CV1763 incorporating MIL-E-1/58	<u>SECURITY</u>	
Issue 1A Dated 1.10.63	<u>Specification</u>	<u>Valve</u>
To be read in conjunction with BS448 and K.1006	UNCLASSIFIED	UNCLASSIFIED

TYPE OF VALVE - Miniature Grounded Grid Triode				<u>MARKING</u> See K.1001/4 Additional Marking:- 6J4	
CATHODE - Indirectly heated				<u>BASE</u> BS448/B7G (Miniature Button 7-Pin)	
ENVELOPE - Glass					
PROTOTYPE - 6J4					
<u>RATING</u>		Note	Pin	Electrode	
Heater Voltage	(V)	6.3	1	g	
Heater Current	(A)	0.4	2	k	
Max. Operating Anode Voltage	(V)	165	3	h	
Max. Heater - Cathode Voltage	(V)	100	4	h	
Max. Anode Dissipation	(W)	2.5	5	g	
Max. Cathode Current	(mA)	20	6	g	
Max. Operating Frequency	{ Mc/s	550	7	a	
Mutual Conductance	{ mA/V	12			
Amplification Factor		55			
			<u>DIMENSIONS</u> BS448/B7G/2.1 Size Ref. No. 2		
<u>CAPACITANCES</u> (pF)			Dimensions (mm)	Min.	Max.
Cg,kh (nom)		5.3	B		
Ca,kh (max)		0.24	B	A. seated height	- 47.5
Ca,g (nom)		3.9	B	C. diameter	16.0 19.0
Chk (nom)		3.6	B	D. overall length	- 54.5
			<u>MOUNTING POSITION</u> Any		

NOTES

- A. Absolute Value
- B. With close fitting metal screen connected to grid
- C. At $V_a = 165V$; $V_{g1} = -1.45V$ ($I_a = 14.5 \text{ mA}$)

Tests

The tests specified in MIL-E-1/58, modified as follows shall apply:-

Ref. 4.10.14 CAPACITANCES:
F-6p

		<u>Min</u>	<u>Max</u>	
Shield # 316 tied to Ground.	Cgp:	2.3	3.3	µmf
Shield # 316 tied to Ground.	Cg-k+h:	4.0	6.6	µmf
Shield # 316 tied to Ground.	Cg-k+h:	-	0.24	µmf
Shield # 316 tied to Ground.	Chk:	1.0	4.5	µmf

CVI763

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Ratings:	Ef	Eb	Ec	Ehk	Rk	Ck	Fp	Ib	Altitude
Absolute	V	Vdc	Vdc	Vdc	Ohms	Uf	W	mAdc	Ft.
Maximum:	6.3/10%	165	—	100	—	—	2.5	20	10,000

Test Cond.: 6.3 150 — — 100 1000 — —

*Height: Max. 2-1/8 in.

**Base: Button 7-Pin Miniature, E7-1

*Diameter: Max. 3/4 in.

**Pin No.:	1	2	3	4	5	6	7	**Cathode:	Coated Unipotential
Element:	g	k	h	h	g	g	p	**Envelope:	T-5 1/2 (6-2)

Ref.	Test	Conditions	Min.	Max.
3.1	Qualification Approval:	Required for JAN Marking		
4.9.18.1.1 F-6a(3b)	Carton Drop:	(d) Package Group 1; Carton Size B		
4.9.19.1	*Vibration	Rp=2000	Ep: —	300 mVac
4.10.8 F-6i	*Heater Current		If: 0.37	0.43 amps
4.10.15 F-6q	*Heater-Cathode Leakage:		Ihk: —	10 uAdc
4.10.6.1 F-6g(1)	Total Grid Current:	Ck=0	Ic: —	-2.0 uAdc
4.10.4.1 F-6f(1)	Plate Current(1):		Ib: 9.0	20.0 mAdc
4.10.4.1 F-6f(1)	Plate Current(2):	Ec=-15Vdc; Rk=Ck=0	Ib: —	75 uAdc
4.10.9 F-6j	Transconductance(1):		Sm: 9000	15000 umhos
4.10.9 F-6j	*Transconductance(2):	Ef=5.5V	Sm: 7500	— umhos
4.10.11.1 F-6l(1)	*Amplification:		Mu: 40	70
4.10.3.1 F-6e(1)	R-F Noise:	Esig=20mVac		
4.10.1.1 F-6c(1)	Emission	Eb=Ec=10Vdc; Rk=0	Is: 70	— mAdc
4.10.14 F-6p	*Capacitance:	Shield #316 tied to G Shield #316 tied to G Shield #316 tied to G Shield #316 tied to G	Cgp: 3.4 Cg-k/h: 4.0 Cg-k/h: — Chk: 2.9	4.5 6.6 0.24 4.3 uuf
4.11 F-4	Life Test:	Group A; Eb=180Vdc; Rk=160; Ck=0; Ib=14mAdc(approx.); Ehk=100Vdc; Rg=0.25Meg.	t: 250	— hrs.
4.11.4 F-4b	Life Test End Point:	Transconductance (1)	Sm: 7800	— umhos

Note 1: Referenced specification shall be of the issue in effect on the date of invitation for bids.

REVISED 5 Feb 1953
APPROVED

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

SPECIFICATION SHEET

TRIODE, R.F. GROUNDED GRID AMPLIFIER USEFUL TO
550 MC, RECEIVING

MIL-E-1/58

PROCUREMENT SPECIFICATION
MIL-E-1

6J4

SHEET 1 OF 1

Other interest: Army - CMOT Navy - AMCMdOrS