MINISTRY OF SUPPLY (S.R.D.E.)

VALVE ELECTRONIC CV 2239

Specification MOS/CV2239 incorporating MIL-E-1/79A
Issue 3 Dated: 23.3.56.
→ To be read in conjunction with K1006 and BS1409

SECURITY	
Specification	Valve
Unclassified	Unclassified

← Indicates a change

TYPE OF VALVE: Triode H.F. Oscillator
CATHODE: Directly Heated
ENVELOPE: Glass, Unmetallised
PROTOTYPE: 5676

MARKING

See K1001/4 except that the valve shall only be marked with the CV No., factory and date code, and "5676". ←

RATING

		Note
Filament Voltage (V)	1.25	
Filament Current (mA)	120	
Max. Anode Voltage (V)	150	A
Anode Current (mA)	4	B
Mutual Conductance (mA/V)	1.65	B
Amplification Factor	15	B
Max. Operating Frequency (Mc/s)	350	
Max. Cathode Current (mA)	11	A

CAPACITANCES (pF)

C_{g1p} (Nom.)	1.3
C_{in} (Nom.)	1.35
C_{out} (Nom.)	3.25

BASE ~~See App. I to CV2237~~
BS448/B5G/F
(In line - lead sub-miniature)

CONNECTIONS

Pin	Electrode
1	p red dot
2	pin omitted
3	-f ←
4	g1
5	+f ←

DIMENSIONS ~~See App.I to CV2237~~
See BS448/B5G/F
Size reference No. 1

DIMENSIONS (Inches)	MIN.	MAX.
A. Overall length	-	1.502
Diameter		
B minor	-	0.286
C major	-	0.386
Lead length	1.5	-

MOUNTING POSITION
Any

NOTES

A. Absolute maximum or minimum values.

B. Measured at Va = 135. Vg1 = -5.0

Z.11986.R.

CV2239

JAN-5676

Ratings:	Ef Vdc	Eb Vdc	Ecl Vdc	Ik mAdc	Alt. ft.
Absolute Maximum:	1.25±20%	150	—	11	10,000
Test Cond.:	1.25	135	-5.0	—	—

*Height: Max. 1.5 in.
**Base: Flat Press (.016 in. tinned flexible leads) Length=1.5 in., Spacing .050 in. c/c

*Diameter: Major: .385 in. max. Minor: .285 in. max.

**Lead No.: 1 2 3 4
Element: p -f g ƒf
Red dot

**Cathode: Coated Filament
**Envelope: T-2x3 glass (8-8)

Ref.	Test	Conditions		Min.	Max.	
3.1	Qualification Approval:	Required for JAN Marking				
4.9.18.1.1 F-6a(3b)	Drop:	(d) Package Group 1; Carton Size D				
—	**Filament-Plate Short:	Note 1				
4.9.5.3	#Subminiature Lead Fatigue:			3	—	arcs
4.10.8 F-6i	*Filament Current:		If:	106	134	mAdc
4.10.6.1 F-6g(1)	†Grid Current:		Icl:	0	-0.5	uAdc
4.10.4.1 F-6f(1)	Plate Current:		Ib:	3.0	5.0	mAdc
4.10.9 F-6j	*Transconductance(1):		Sm:	1300	2000	umhos
4.10.9 F-6j	†Transconductance(2):	Ef=1.0V	Sm:	1200	2000	umhos
4.10.11.1 F-6ℓ(1)	*Amplification Factor:		Mu:	12.75	17.5	
4.10.14 F-6p	*Capacitance:	Note 2	Cgp:	1.0	1.6	uuf
			Cin:	1.0	1.7	uuf
			Cout:	2.5	4.0	uuf
4.11 F-4	Life Test:	Group A;Rg=0.010 Meg. (min);Ef=1.25 Vdc or Vac with equivalent bias	t:	100	—	hrs.
4.11.4 F-4b	Life Test End Point:	Transconductance (1):	Sm:	950	—	umhos

Note 1: Raise Ef until filament opens. Test for filament to plate short only. After performance of the filament burn-out test, if the short circuit shall pass in excess of five times the rated filament current without burning out the short circuit, the tube shall be deemed a failure. This test shall be performed by a Service Laboratory on three tubes, which shall be in additional to the required number of qualification approval samples. Manufacturer's date are not required for this test.

Note 2: With close fitting shield connected to negative filament.

Note 3: Referenced specification shall be of the issue in effect on date of invitation for bids

APPROVED 5 Feb 1953 REVISED 20 May 1953

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

PROCUREMENT SPECIFICATION
MIL-E-1

SPECIFICATION SHEET

SUBMINIATURE TRIODE, RF OSCILLATOR, RECEIVING
5676

MIL-E-1/79A

SHEET 1 OF 1

Other interest: Army - CMOT Navy - AMCMdOrS

ELECTRONIC VALVE SPECIFICATION

CV 2239 Issue 3 dated 23/3/56.

AMENDMENT No. 1.

Page A Base.

Delete:- See Appendix I to CV2237

Dimensions

Delete:- See Appendix I to CV2237

27.2.62

December, 1961.
N 7727

Signals Radio Development Establishment