MINISTRY OF SUPPLY - DLRD(A)/RRE VALVE ELECTRONIC **CV2289**

Specification MOS(A)/CV2289 Issue 2 Dated 8. 4. 54. To be read in conjunction with K1001.	SECURITY Specification: UNCLASSIFIED Valve: UNCLASSIFIED

→ Indicates a change

TYPE OF VALVE - High Vacuum, Half-wave Rectifier
CATHODE - Directly-heated
ENVELOPE - Glass - Unmetallised
PROTOTYPE - U37

MARKING

See K1001/4

RATING

			Note
Filament Voltage	(V)	1.4	
→ Filament Current	(A)	0.15	
Max. Peak Inverse Voltage	(kV)	15	A,B
Max. Peak Inverse Voltage with direct switching	(kV)	10	A
Max. Mean Rectified Current	(mA)	2	A
Max. Peak Anode Current	(mA)	12	A
TYPICAL OPERATING DATA			
Sinusoidal Input			
RMS Input Voltage	(kV)	5.3	
Rectified Voltage	(kV)	7.5	
Rectified Current	(μA)	100	
→ Reservoir Condenser (50 c/s wkg; 15% ripple)	(μF)	0.005	
Pulse Input (See Note C)			
Peak Input Voltage	(kV)	7.5	
Rectified Output Voltage	(kV)	7	
Rectified Output Current	(μA)	100	
Optimum Reservoir Condensor	(μF)	0.001	
CAPACITANCES (pF)			
Ca-f		0.65	

BASE

None

CONNECTIONS

Lead	Electrode
Top Lead	Anode
Bottom Leads	Filaments

DIMENSIONS ←

See Drawing on Page 2

MOUNTING POSITION

Any

NOTES

A. Absolute maximum value.

→ B. This rating applies to circuits where the anode voltage rises at approximately the same rate as the filament voltage, e.g. in fly-back and RF oscillator circuits. When used in power input circuits with full AC anode voltage applied on switching, the maximum peak inverse voltage is 10 kV.

C. PRF = 20 kc/s; Tp = 5/usecs.

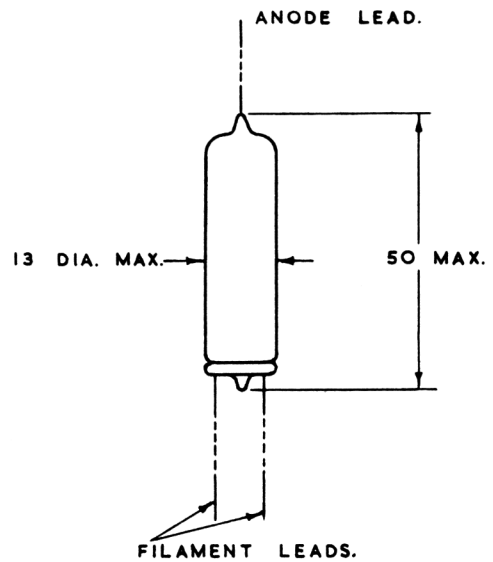
TESTS

To be performed in addition to those applicable in K1001

	Test Conditions			Test	Limits		No. Tested	Note
		Vf (V)	Va (V)		Min.	Max.		
→	a	1.4	0	Filament Current (A)	0.13	0.17	100%	
→	b	1.4	85V DC max.	Anode Current (mA)	4	-	100%	
→	c	1.4	Input voltage = 5.3 kV RMS; Frequency = 50 cps; Output current = 100 μA nominal; Reservoir condenser = 0.1 μF; Effective external resistance = 100k.	Load Test Run for 1 minute and reject for persistent flashover.	-	-	100%	1

NOTE

→ 1. An alternative Load Test may be performed at f = 100 kc/s approx, using a reservoir condenser = 0.001 μF. Other conditions as for Test (c).



LEAD LENGTH 30 (NOM.)

ALL DIMENSIONS IN MM