VALVE ELECTRONIC CV 1629

P.O. TELECOMMUNICATIONS HQRS. TD 2 (W)
(POVT 197)

Specification: G.P.O./CV1629/Issue 1a Dated: 30.7.68 To be read in conjunction with K 1001	SECURITY Specification: Unclassified Valve: Unclassified

→ indicates a change

TYPE OF VALVE: Mercury vapour rectifier
CATHODE: Directly heated
ENVELOPE: Unmetallised glass
PROTOTYPE RG3 - 1250; GU21

MARKING
See K1001/4
Additional markings required (See Notes A & B)
Serial No.. .....
Filament Volts 4.0

RATING

			Note
Filament voltage	(V)	4.0	
Nominal filament current	(A)	7.0	
Max. peak inverse voltage	(kV)	11.0	
Max. peak anode current	(A)	5.0	
Max. mean anode current	(A)	1.25	
Nominal voltage drop	(V)	16.0	

BASE
Goliath Edison Screw
See K1001/AIV/D13.1

CONNEXION

Contact	Electrode
Thread	Filament
Button	Filament
T.C.	Anode

TOP CAP
RG3 - 1250 :- See K1001/A1/D5.4
GU21 :- See K1001/A1/D5.7

DIMENSIONS
See K1001/A1/D1

Dimension	Min.	Max.
A (mm)	-	250
B (mm)	-	60

NOTES

A. The Serial Numbers will be allotted by the Inspecting Officer
B. It is not essential that the additional markings shall appear within the frame.

CV 1629

TESTS

To be performed in addition to those applicable in K1001.

	TEST CONDITIONS		TEST	LIMITS		No. Tested	Note
	Vf(V)	Va(D.C)		Min.	Max.		
(a)	4.0	-	If (A)	6.0	8.0	100%	
(b)	4.0	Read	Anode voltage required to produce anode current of 1.25A (V)	-	18.0	100%	3
(c)	4.0	3.5 kV	D.C. output per valve (A)	1.0	-	100%	1 & 4
(d)	4.0	-11.0 kV	Inverse voltage	Reject for arcing back		100%	2 & 4

NOTES

1. This test shall be conducted in a bi-phase half-wave circuit, and its duration shall be fifteen minutes.
   No sparking or flash-over shall occur

2. The duration of test (d) shall be one minute.

3. An approved pulse emission test may be used as specified in K1006 4.10.1.2 with the Ia = 10A (pulsed) and a limit of Ea = 14v maximum.

4. Alternatively tests (c) and (d) may be done with the valve under test operated in a half-wave "cheater" circuit, in which the inverse Va is applied through a high resistance from a separate high-voltage low-current transformer provided that the circuit includes an arc-back indicator to record <u>any</u> arc-backs that may occur in the valve during test.
   If test "b" is done using such a "cheater" circuit the test shall last for 5 minutes, with the operating frequency = 50 Hz, the D.C. output current = 1.25A, the peak Ia = 5A and the anode P.I.V. = 11kV min.
   The valve shall operate satisfactorily, and there shall be no arc-back or sparking throughout the test period.