VALVE ELECTRONIC CV575 (5U4G)

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

Specification MOS/CV575/Issue 4 Dated:- 3.7.46 To be read in conjunction with K1001 ignoring clauses:- 5.2 and 5.8.	SECURITY Specification: Restricted Valve: Restricted

→ indicates a change

TYPE OF VALVE:- High Vacuum full wave rectifier
CATHODE:- Directly heated
ENVELOPE:- Glass-unmetallised
PROTOTYPE:- 5U4G

MARKING
See K1001/4

RATING			Note
Filament voltage	(V)	5.0	
Nominal filament current	(A)	3.0	
Max. applied R.M.S. voltage	(V)	450	
Max. working peak inverse voltage	(V)	1200	
Max. no load peak inverse voltage	(V)	1500	
Max. mean D.C. rectified current	(mA)	225	
Max. peak anode current	(mA)	675	
Max. reservoir condenser	(uF)	16	
Min. limiting resistance per anode introduced externally	(ohms)	75	

(Ratings apply to condenser input filter and 50 c.p.s. supply)

BASE
IO

Pin	Electrode
1	No connection
2	Filament
3	Pin omitted
4	Anode
5	Pin omitted
6	Anode
7	Pin omitted
8	Filament

DIMENSIONS
See K1001/A1/D1

Dimension	Min.	Max.
A mm	-	136
B mm	-	53

CV575

TESTS

To be performed in addition to those applicable in K1001.

	Test conditions		Test	Limits		No. tested
	Vf	Va		Min.	Max.	
a	5.0 A.C.	-	If (A)	-	3.3	100% or S
b	5.0 A.C.	60 D.C. max.	Ia (mA) Note 1	200	-	100%
c	5.0 A.C.	Input voltage 450-0-450 R.M.S. frequency 50 c.p.s. D.C. load 225 mA Reservoir condenser 4 uF. Effective resistance per anode introduced externally 75 ohms.	Load Test Output voltage. Run 1 minute Reject for softness or persistent flushover.	420	-	100%

NOTES

1. Test to be applied to each anode.

FULL-WAVE RECTIFIER

DATA SHEET

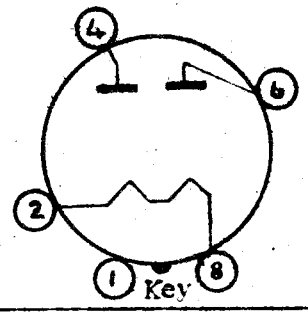
VALVE ELECTRONIC CV 575 5U4G

Data given for information of equipment designers and not subject to acceptance testing.

Issue No.b. Dated 18.12.44.
No. of Pages:- 2.

Vf = 5.0 V.
If = 3.0 A.

See specification for dimensions, connections and main ratings (with condensed input-filter).



Bottom View

TYPICAL OPERATING CONDITIONS WITH CHOKE-INPUT FILTER

A.C. Anode Voltage Per Anode (V. R.M.S.)	550 Max.
Input-Choke Inductance (Henries)	3.0 Min.
D.C. Output Current (mA)	225 Max.

NOTES

1. Valve may be operated horizontally if pins 1 and 4 are in vertical plane.

2. When a filter input condenser larger than 40 µF. is used, it may be necessary to use more limiting resistance per anode than the minimum value shewn in specification.

TYPICAL CHOKE-INPUT FILTER.

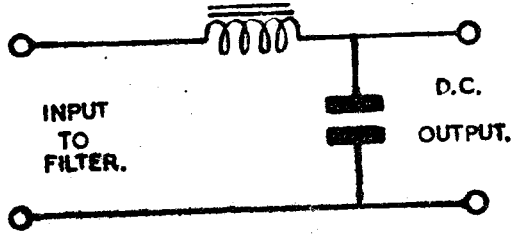


FIG 1

AVERAGE PLATE CHARACTERISTIC.

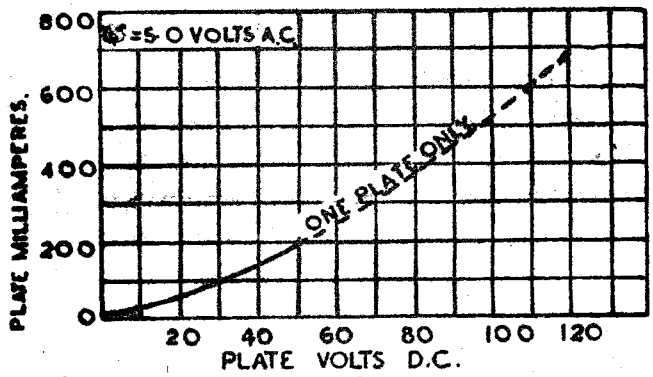


FIG 2

OPERATION CHARACTERISTICS

— — — CHOKE (L) INPUT TO FILTER.
L = 3 HENRIES (MIN)

——— CONDENSER (C) INPUT TO FILTER.
C = 4 μf; TOTAL EFFECT. PLATE SUPPLY.
IMPEDANCE PER PLATE = 75 OHMS.
Vf = 5·0 VOLTS A.C.