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

VALVE ELECTRONIC CV587

(NR68/6Q7G/POVT194)

Specification MOS/CV587/Issue 6 Dated:- 18.6.46 To be read in conjunction with K1001.	SECURITY Specification Restricted | Valve Restricted

→ indicates a change

TYPE OF VALVE:- Double diode triode
CATHODE:- Indirectly heated
ENVELOPE:- Glass-unmetallised
PROTOTYPE:- 6Q7G, DH63

MARKING
See K1001/4
Additional marking:-
6Q7G.

RATING			Note
Heater voltage		6.3	
Heater current	(A)	0.3	
Max. anode voltage		300	
Anode current	(mA)	1.1	A
Mutual conductance	(mA/V)	1.2	A
Amplification factor		70	A
Anode impedance	(ohms)	58,000	A
CAPACITANCES (pF)			
Cag		1.7	
Cge		2.2	
Cae		3.2	

BASE
IO

Pin	Electrode
1	No connection
2	Heater
3	Anode
4	Diode 2
5	Diode 1
6	Pin omitted
7	Heater
8	Cathode
TC	Control grid

TOP CAP
See K1001/AI/D5.2

NOTES

A. At Va = 250V, Vg1 =-3V.

DIMENSIONS
See K1001/AI/D1

Dimension	Min.	Max.
A mm	105	114
B mm	-	40

TESTS

To be performed in addition to those applicable in K1001

	Test conditions			Test	Limits		No. tested
	Vh	Va	Vg		Min	Max	
a	6.3	0	0	Ih (A)	0.27	0.33	100% or S
	Triode Section						
b	6.3	250	-3	Ia (mA)	0.7	2.0	100%
c	6.3	250	-3	gm (mA/V)	0.8	1.5	100%
d	6.3	250	-3	Rev Ig (uA)	-	1.0	100%
	Diode Section						
e	Vh		Vd	Id (mA) (Note 1)	0.8	-	100%
	6.3		+10				

NOTES

1. This test to be applied to both diodes.

DOUBLE-DIODE TRIODE. DATA SHEET. VALVE ELECTRONIC **CV587**

NR68, 6Q7G

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

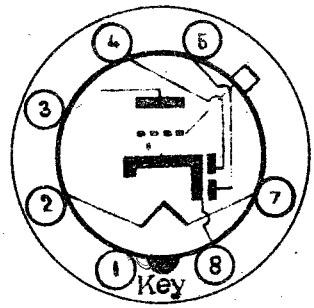
Issue No. b. Dated 18.12.44.

No. of pages :- 2.

Vh = 6.3 V.

Ih = 0.3 A.

See specification for dimensions, connections, main ratings and capacities.



Bottom View

OUTPUT VOLTAGE WITH 0.25 MEGOHM ANODE LOAD AT Va = 250, Vg = -3.

A.C. Input Volts R.M.S.	A.C. Output Volts R.M.S.
0.1	3.0
0.2	6.0
0.4	12.0
0.8	25.0

TYPICAL OPERATING CONDITIONS.

Anode voltage (V)	100	100	250
Grid voltage (V)	0	-1.5	-3.0
Anode current average (mA)	2.3	0.35	1.1
Amplification factor	60.0	70.0	70.0
Impedance (ohms)	43,000	87,500	58,000
Mutual Conductance (mA/V)	1.4	0.8	1.2
Cathode bias res. (ohms)			2,000
Optimum load res. (ohms)			250,000
Max. diode signal (V)			200
Max. diode current (mA)			0.8

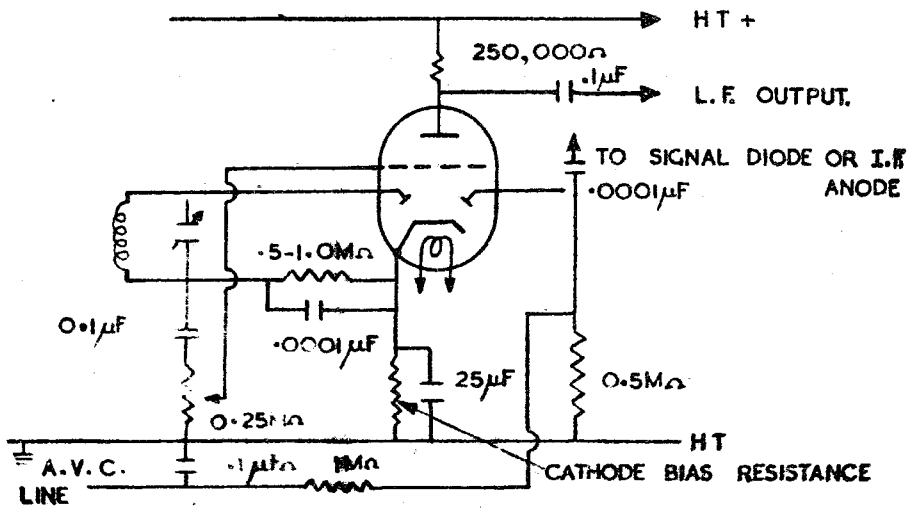
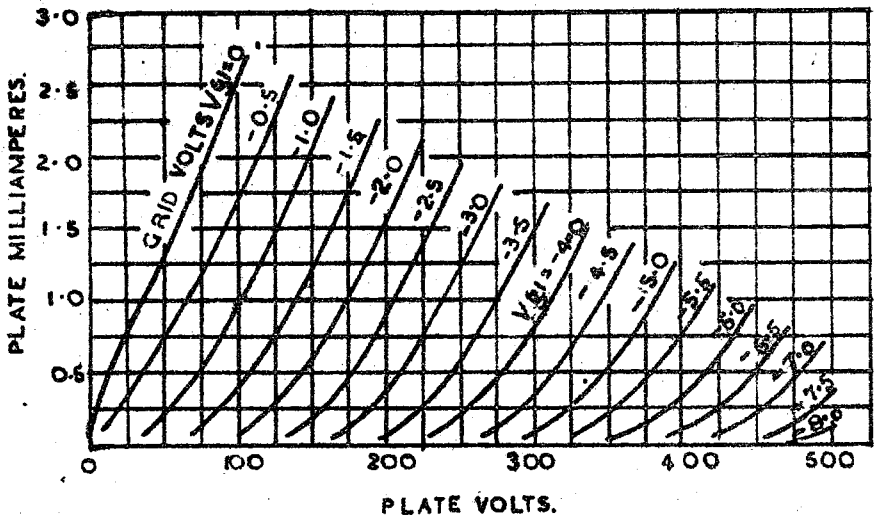


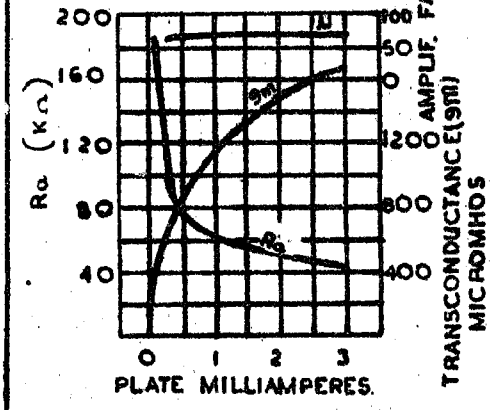
FIG. 1.

AVERAGE PLATE CHARACTERISTICS.
TRIODE UNIT.



AVERAGE CHARACTERISTICS

Vh = 6·3 VOLTS.
PLATE VOLTS = 250



VOLTS RMS.