



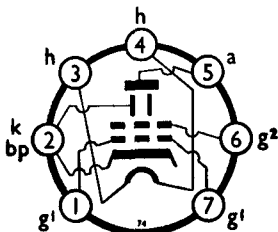
OUTPUT BEAM TETRODE
6.3V INDIRECTLY HEATED

N727/6AQ5

NOVEMBER, 1954

The N727/6AQ5 is a commercial equivalent of CV1862.

BASE CONNECTIONS AND VALVE DIMENSIONS



View from underside
of base.

Base : B7G
Bulb : Tubular

Overall length : 70.5 max. mm.
Seated length : 63.5 max. mm.
Diameter 19 max. mm.

HEATER

V_h	6.3	V
I_h	0.45	A

MAXIMUM RATINGS (design centre)

Pentode connection

V_a	250	V
V_{g2}	250	V
V_{h-k}	150	V
P_a	12	W
P_{g2}	2	W

Triode connection

V_{a+g2}	250	V
P_{a+g2}	14	W

CHARACTERISTICS

Pentode connection

V_a	180	250	V
V_{g2}	180	250	V
V_{g1}	-8.5	-12.5	V
I_a	29	45	mA
I_{g2}	3	4.5	mA
g_m	3.7	4.1	mA/V
r_a	58	52	k Ω
μ (g1-g2)	10	10	

Triode connection

V_{a+g2}	250	V
V_{g1}	-12.5	V
I_{a+g2}	49.5	mA
g_m	5.0	mA/V
r_a	1.9	k Ω
μ	9.5	

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N727/6AQ5

CAPACITANCES (of cold valve)

c_{in}	8.3	pF	c_{out}	8.2	pF	c_{a-g1}	0.35	pF
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TYPICAL OPERATION

Pentode connection

Single valve Class A

V_a	180	250	V
V_{g2}	180	250	V
V_{g1}	-8.5	-12.5	V
I_a	29	45	mA
I_{g2}	3	4.5	mA
v_{in} (pk)	8.5	12.5	V
R_k	270	240	Ω
R_L	5.5	5	k Ω
P_{out}	2	4.5	W
D	8	8	%

Push-pull. Class AB₁. Two valves.

Data per pair unless otherwise stated.

	No signal	Max signal	
V_a	250	250	V
V_{g2}	250	250	V
V_{g1}	-15	—	V
I_a	70	79	mA
I_{g2}	5	13	mA
v_{in} (pk) ($g1-g1$)	—	30	V
R_k (per valve)	390	—	Ω
R_L (a-a)	10	10	k Ω
P_{out}	—	10	W
D	—	5	%

GENERAL

The maximum permissible D.C. grid resistance between control grid and cathode is limited to 0.5 M Ω for auto-bias and 0.1 M Ω for fixed bias applications.

MOUNTING

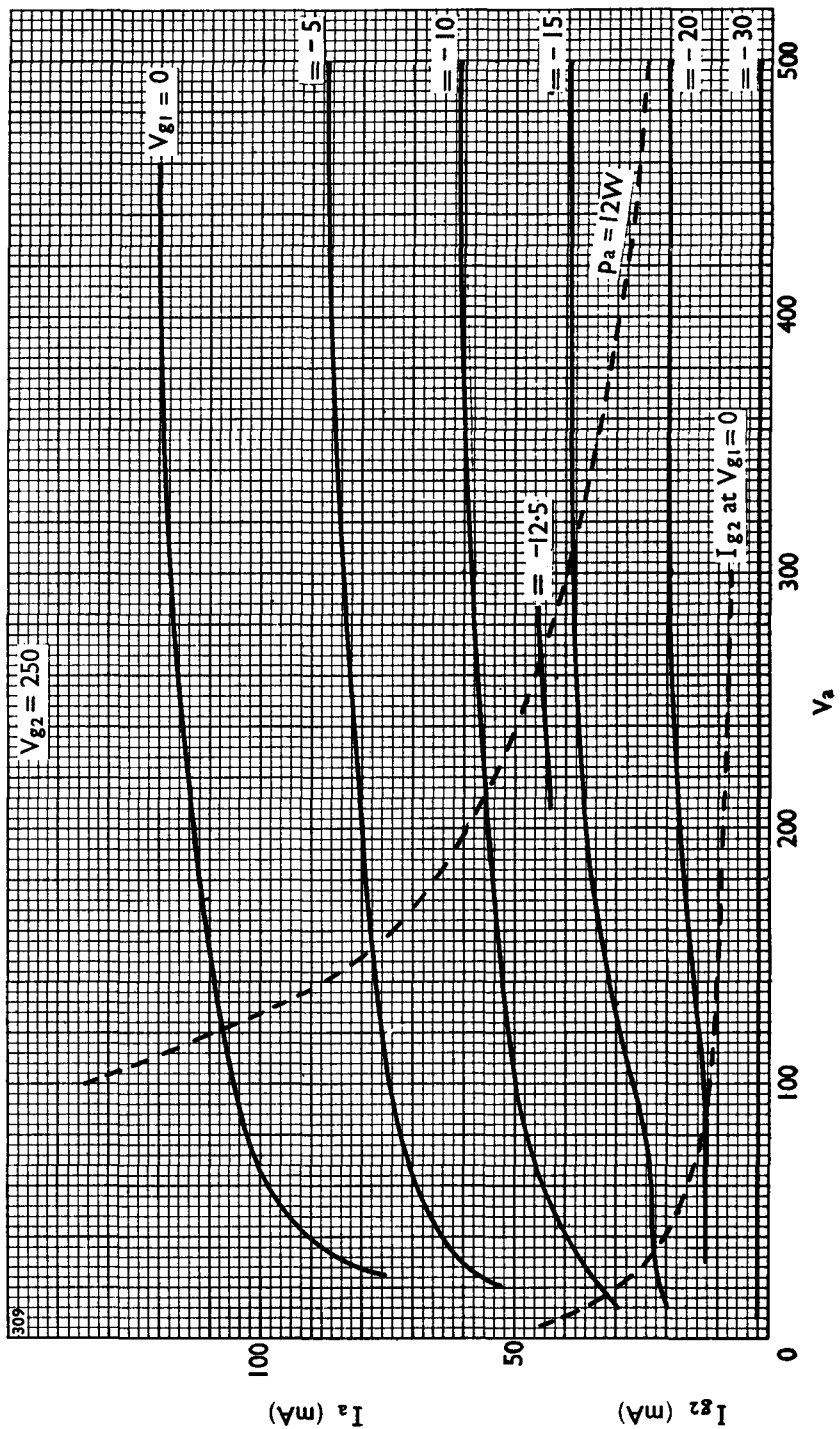
Any position.

RETAINING

It is recommended that a retaining device is used.

VENTILATION

Free air circulation around the bulb is preferable. The temperature of the hottest part of the bulb must not exceed 250°C.



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