



Triode Type DA 100

POWER AMPLIFIER AND MODULATOR

General. The DA 100 is a triode valve fitted with a directly heated oxide-coated cathode. It is suitable for use as a power amplifier in Class AB1 or AB2 amplifiers or as a modulator.

Cooling. The valve must have adequate ventilation.

Mounting. The valve should be mounted vertically, cap down, in a 4-pin base type L4.

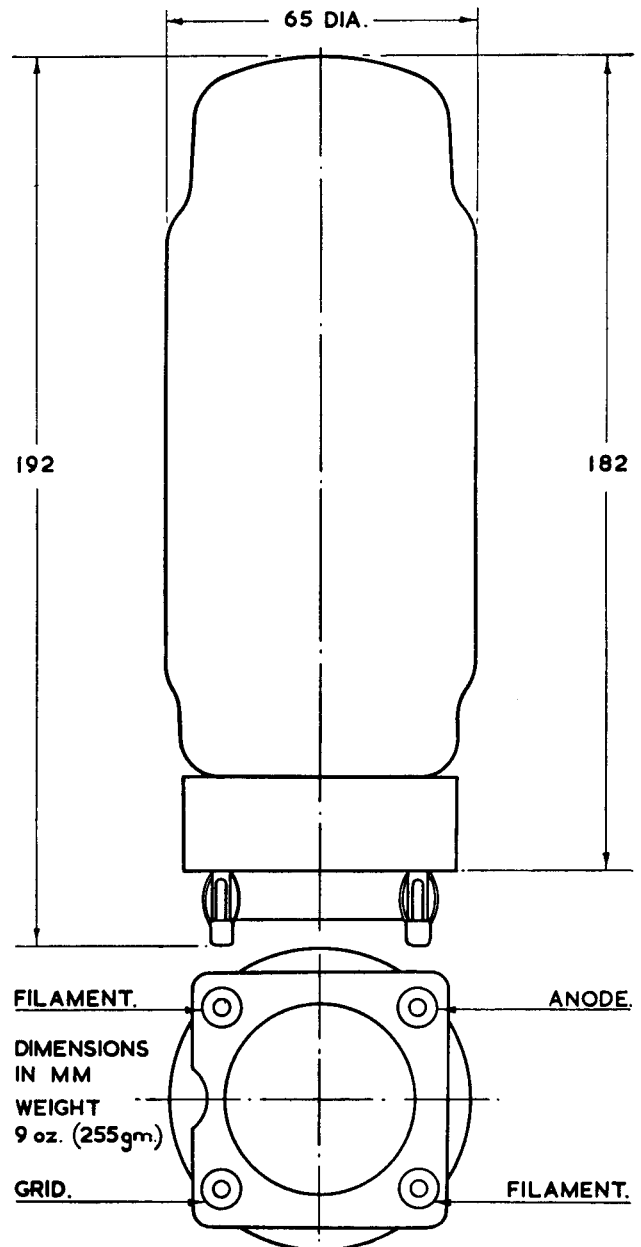
APPROXIMATE DATA

| | | | |
|--------------|--|-------|----------|
| V_f | 6 | V | |
| I_f | 2.7 | A | |
| V_a | 1,250 | V | |
| $P_{a(max)}$ | 100 | W | |
| μ | } taken at V_a 1,000 V I_a 100 mA { | 5.5 | |
| r_a | | 1,410 | Ω |
| g_m | | 3.9 | mA/V |
| C_{a-g1} | | 15.7 | pF |
| C_{a-k} | | 10.8 | pF |
| C_{g1-k} | | 15.8 | pF |

Operating Notes

The power supply should have an impedance not exceeding 400 Ω .

Under AB2 conditions the anode dissipation rises to a maximum at approximately one-half full output.



MARCONI'S WIRELESS TELEGRAPH COMPANY LIMITED

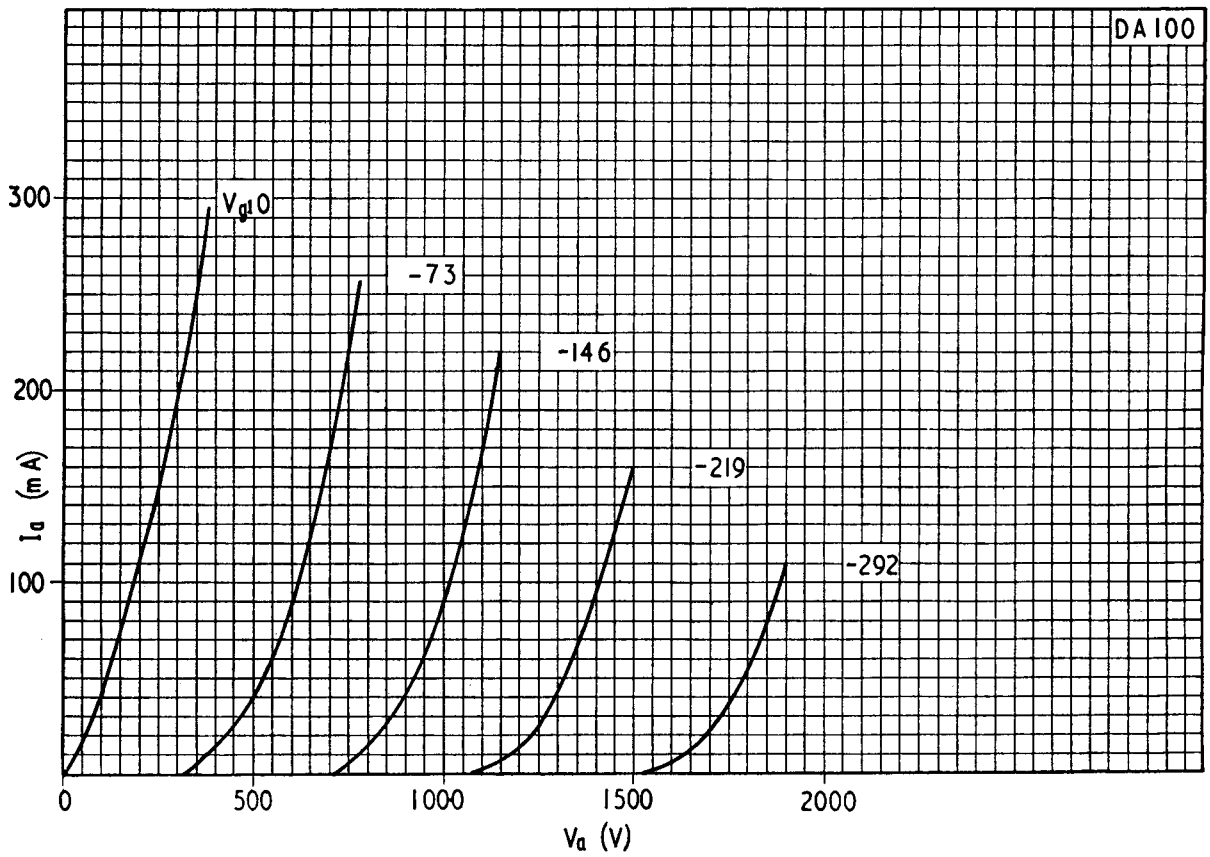
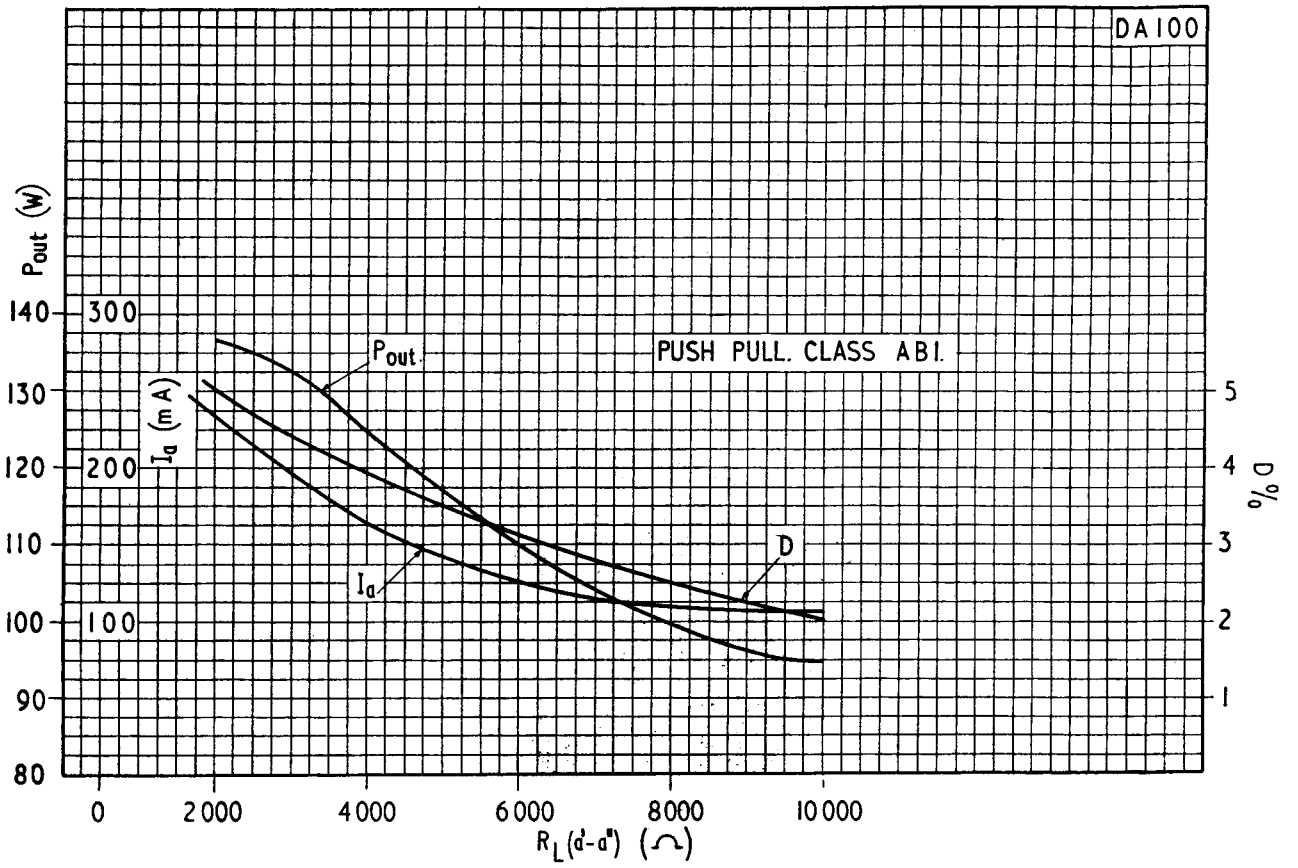
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(1) TWO VALVES. CLASS AB1 PUSH-PULL*(Operating data per pair of valves unless otherwise stated)**Maximum permissible ratings*

| | | | |
|-------------------------------|--------------------------|-------|----------|
| V_a | | 1,250 | V |
| P_a | | 100 | W |
| | Typical Operation | | |
| $V_{a(max-sig)}$ | 1,000 | 1,250 | V |
| $I_{a(zero-sig)}$ | 100 | 100 | mA |
| $I_{a(max-sig)}$ | 330 | 300 | mA |
| $P_{a(zero-sig)}$ (per valve) | 55 | 70 | W |
| $P_{a(max-sig)}$ (per valve) | 53 | 100 | W |
| V_{gl} | -200 | -225 | V |
| $V_{in(pk)(g'_1-g''_1)}$ | 400 | 450 | V |
| I_{gl} | — | — | |
| $R_{L(a'-a'')}$ | 4,000 | 8,000 | Ω |
| P_{out} | 125 | 175 | W |
| D | 4.0 | 5.0 | % |

(2) TWO VALVES. CLASS AB2 PUSH-PULL*(Operating data per pair of valves unless otherwise stated)**Maximum permissible ratings*

| | | | |
|-------------------------------|--------------------------|-------|----------|
| V_a | | 1,250 | V |
| P_a | | 100 | W |
| | Typical Operation | | |
| $V_{a(max-sig)}$ | 1,000 | 1,250 | V |
| $I_{a(zero-sig)}$ | 100 | 100 | mA |
| $I_{a(max-sig)}$ | 300 | 365 | mA |
| $P_{a(zero-sig)}$ (per valve) | 55 | 55 | W |
| $P_{a(max-sig)}$ (per valve) | 50 | 80 | W |
| V_{gl} | -200 | -225 | W |
| $V_{in(pk)(g'_1-g''_1)}$ | 500 | 560 | V |
| I_{gl} | 15 | 20 | mA |
| $R_{L(a'-a'')}$ | 8,000 | 8,000 | Ω |
| P_{out} | 200 | 300 | W |
| D | 6.0 | 6.0 | % |





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