



# 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.

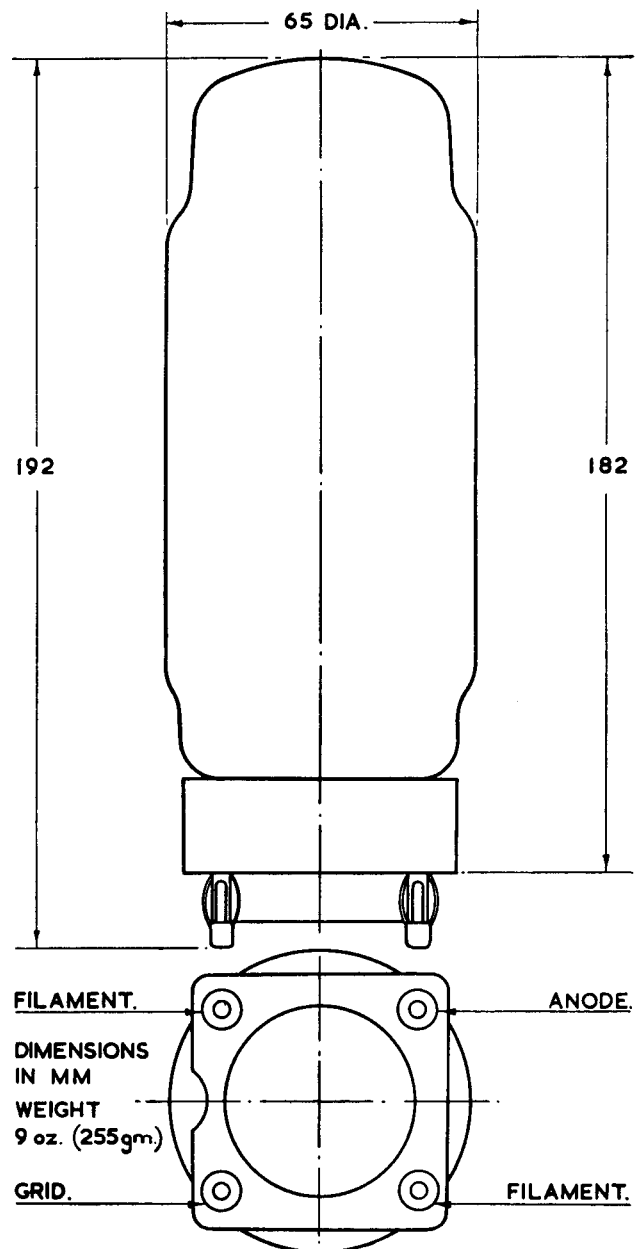
## APPROXIMATE DATA

$V_f$	6	V
$I_f$	2.7	A
$V_a$	1,250	V
$P_{a(max)}$	100	W
$\mu$	} taken at $V_a$ 1,000 V $I_a$ 100 mA	5.5
$r_a$		1,410
$g_m$	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  $\Omega$ .

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



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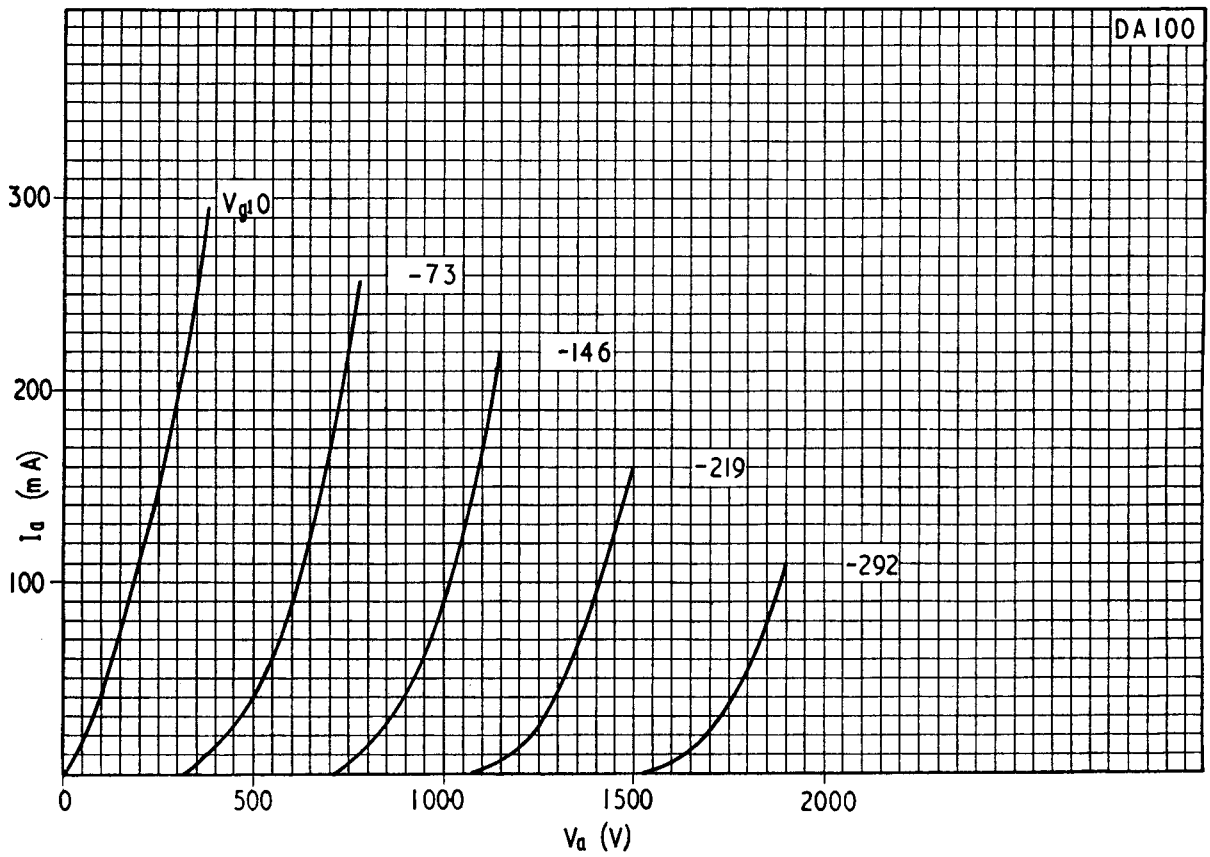
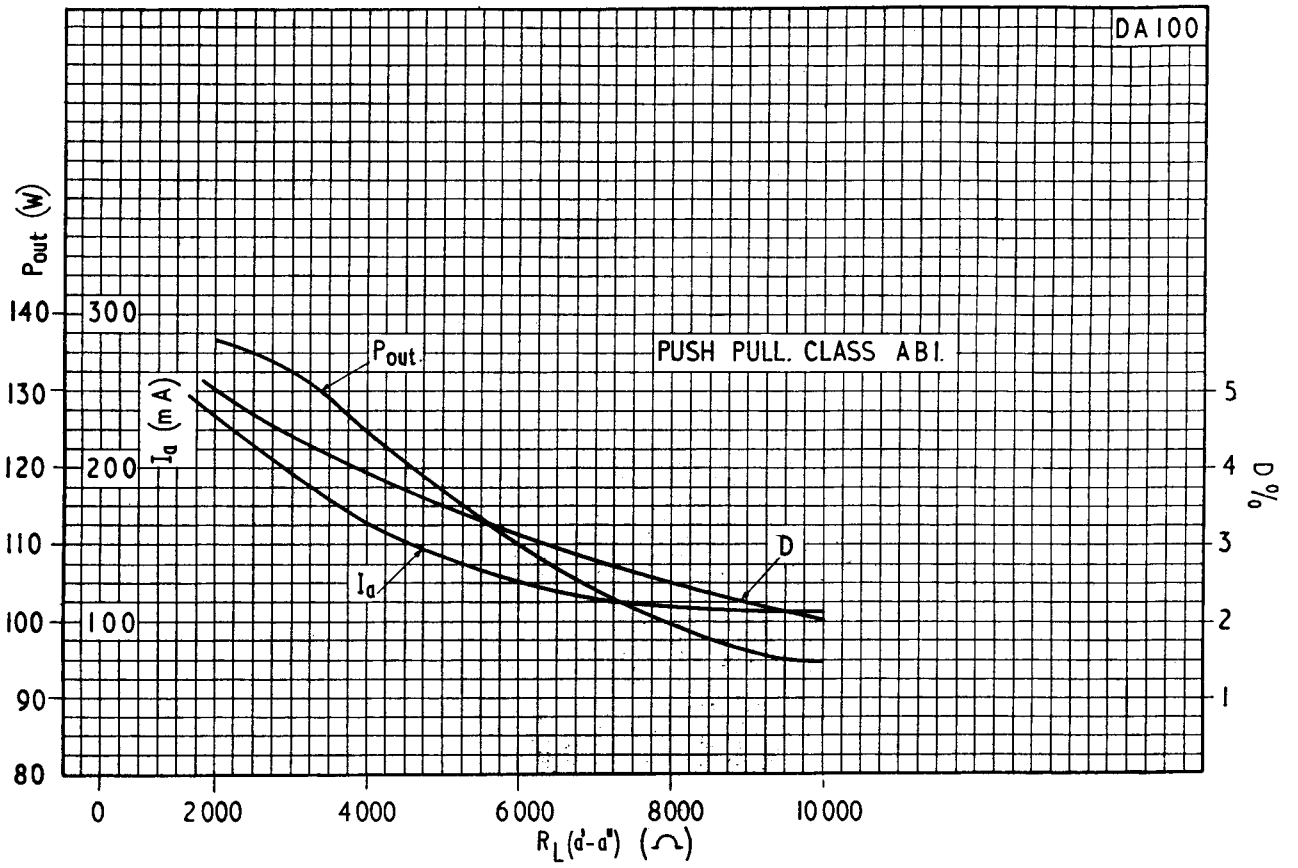
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**(1) TWO VALVES. CLASS AB1 PUSH-PULL***(Operating data per pair of valves unless otherwise stated)**Maximum permissible ratings*

$V_a$		1,250	V
$P_a$		100	W
	<b>Typical Operation</b>		
$V_{a(max-sig)}$	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	$\Omega$
$P_{out}$	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
	<b>Typical Operation</b>		
$V_{a(max-sig)}$	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	$\Omega$
$P_{out}$	200	300	W
D	6.0	6.0	%





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