

R.F. OUTPUT PENTODE

DL98

R.F. output pentode intended for use in portable equipment as a class 'C' r.f. amplifier, oscillator and frequency multiplier.

FILAMENT

	Series	Parallel	
V_f	2.5	1.25	V
I_f	165	330	mA

When the filament sections are series connected, the lower section of the filament should be shunted by a resistor to by-pass the cathode current of the upper section.

MOUNTING POSITION

Any

CAPACITANCES (measured without an external shield)

C_{a-g1}	< 160	mpF
C_{in}	4.6	pF
C_{out}	7.6	pF

CHARACTERISTICS

V_a	90	135	V ←
V_{g2}	90	120	V ←
I_a	15	30	mA
I_{g2}	1.0	1.8	mA
g_m	1.7	2.15	mA/V ←
r_a	22	22	kΩ
μ_{g1-g2}	3.2	3.45	
V_{g1}	-9.9	-10	V

OPERATING CONDITIONS

As class 'C' amplifier or oscillator

		†	
f	100	100	Mc/s
V_a	90	150	V
V_{g2}	90	135	V
V_{g1}	-18	-39	V
I_a	15	25	mA
I_{g2}	4.8	6.2	mA
I_{g1}	400	550	μA
P_{drive}	30	70	mW
P_{load}	0.45	1.25	W

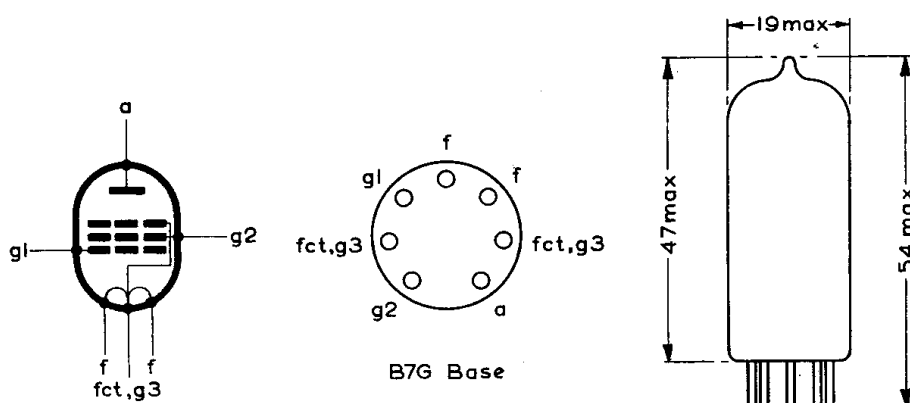
† This condition represents operation at the absolute limit of V_a , V_{g2} and I_a

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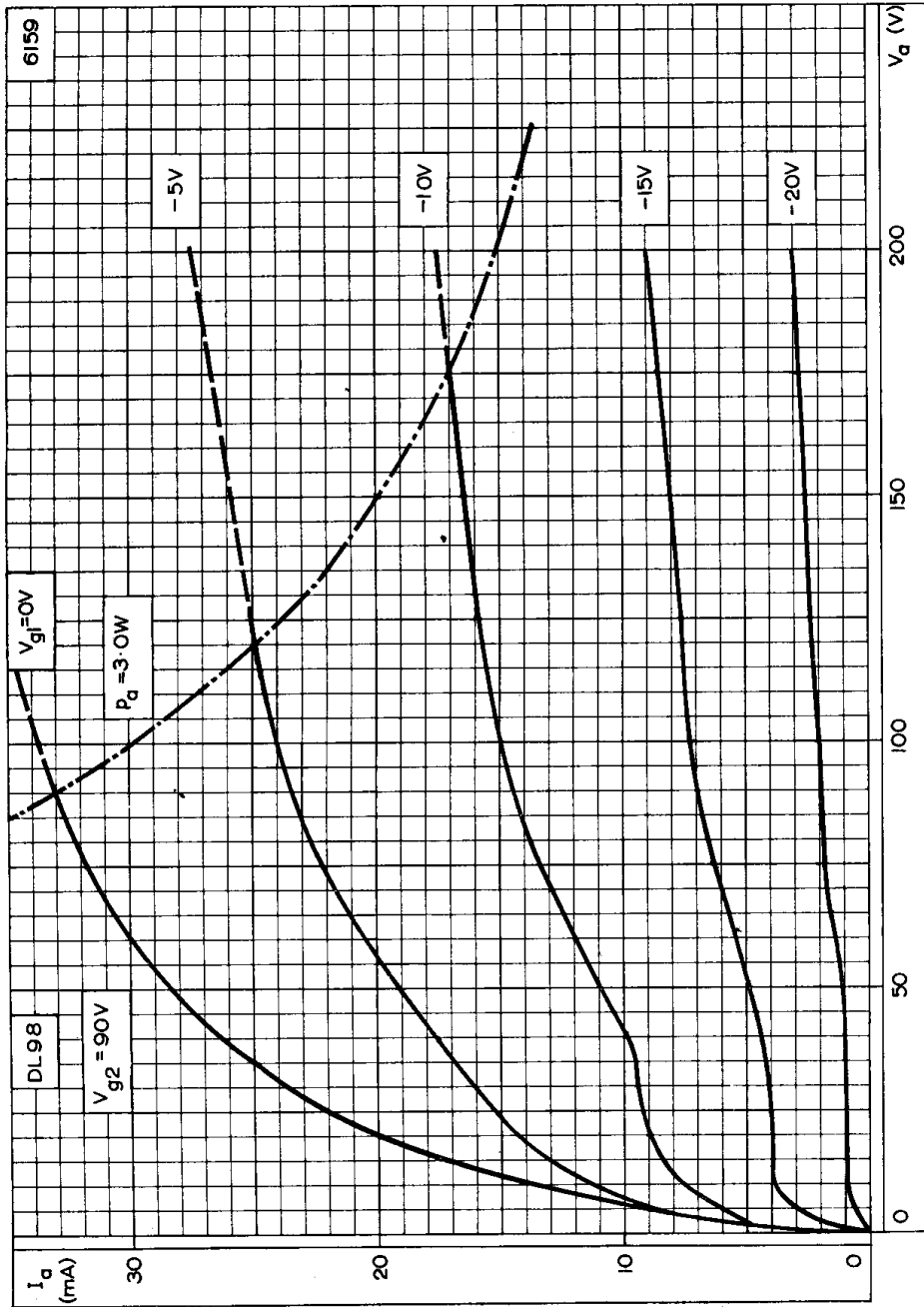
ABSOLUTE MAXIMUM RATINGS

V_a max.	150	V
p_a max.	3.0	W
V_{g2} max.	135	V
p_{g2} max.	1.1	W
$-V_{g1}$ max.	75	V
I_a max.	25	mA
I_{g1} max.	1.5	mA
R_{g1-k} max.	100	k Ω
I_k max.	32	mA



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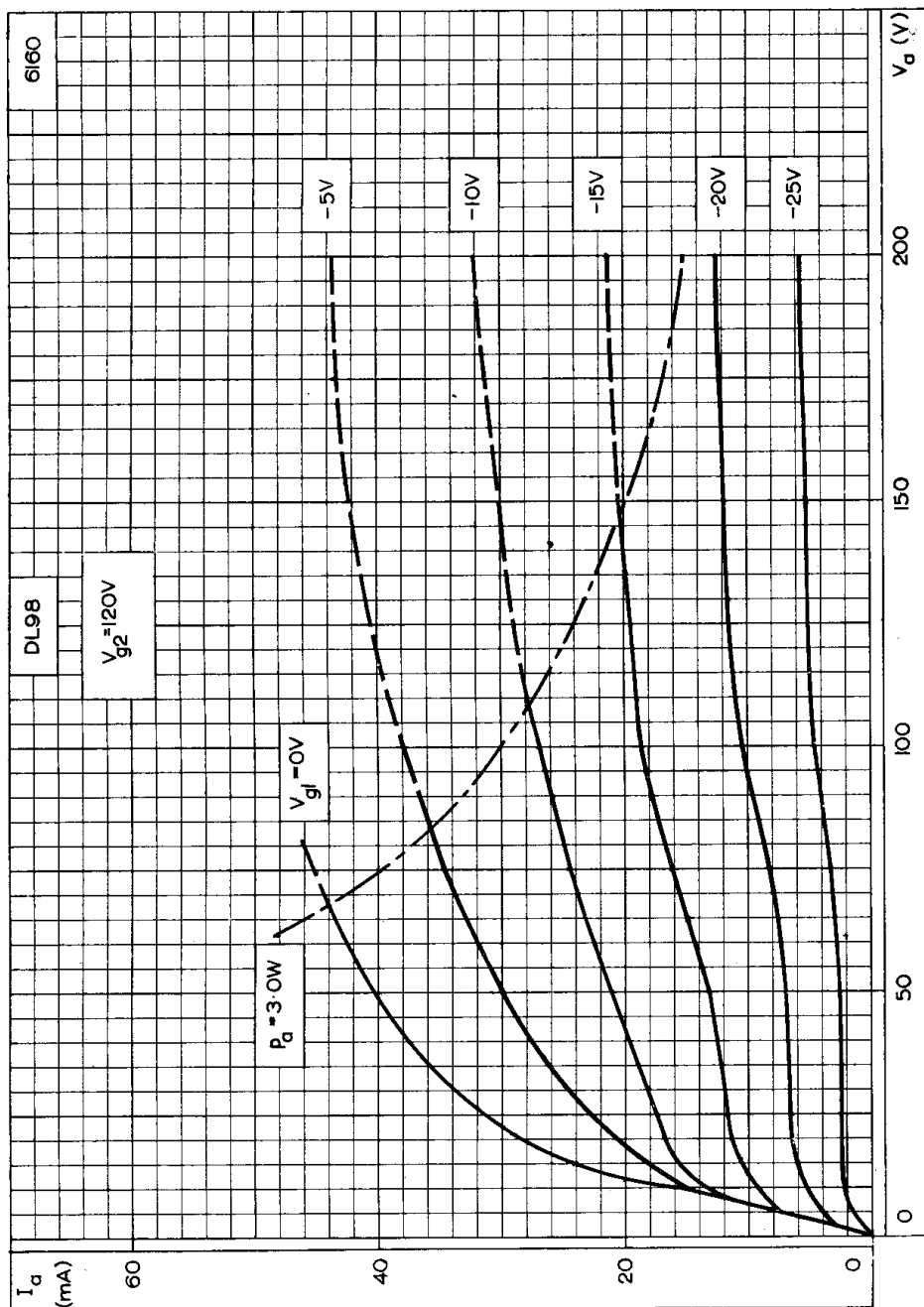
All dimensions in mm



ANODE CURRENT PLOTTED AGAINST ANODE VOLTAGE WITH CONTROL-GRID VOLTAGE AS PARAMETER. $V_{g2} = 90V$

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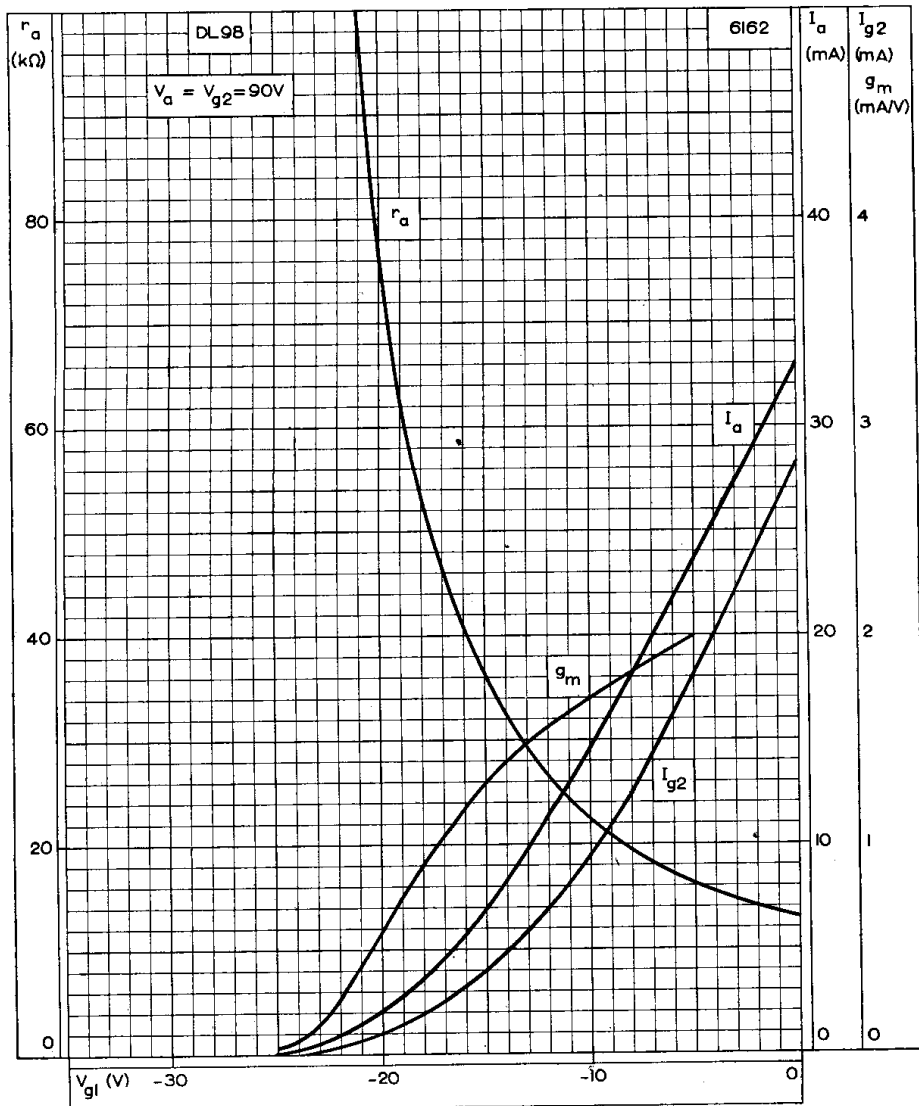
R.F. OUTPUT PENTODE



ANODE CURRENT PLOTTED AGAINST ANODE VOLTAGE WITH CONTROL-GRID VOLTAGE AS PARAMETER. $V_{g2} = 120V$

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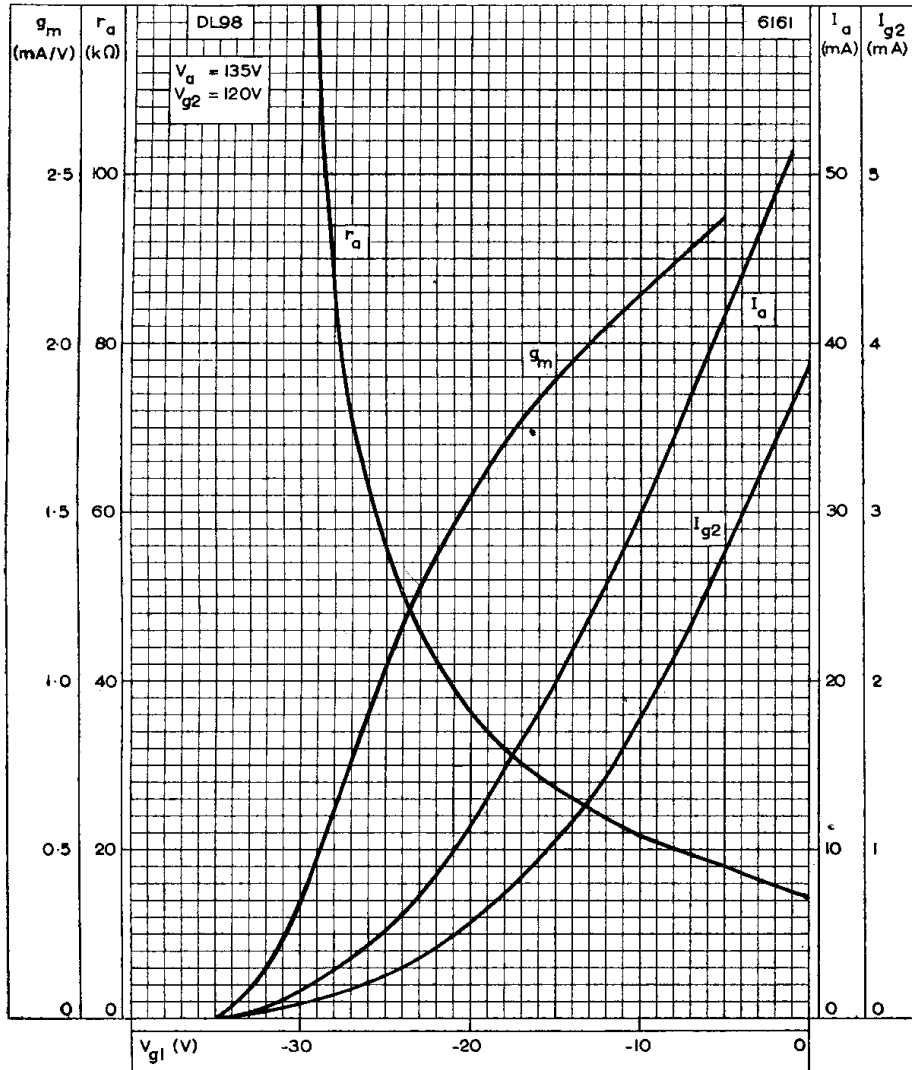
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ANODE AND SCREEN-GRID CURRENTS, MUTUAL CONDUCTANCE AND ANODE IMPEDANCE PLOTTED AGAINST CONTROL-GRID VOLTAGE. $V_a = V_{g2} = 90V$

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R.F. OUTPUT PENTODE



ANODE AND SCREEN-GRID CURRENTS, MUTUAL CONDUCTANCE AND ANODE IMPEDANCE PLOTTED AGAINST CONTROL-GRID VOLTAGE. $V_a = 135V$, $V_{g2} = 120V$