

R.F. PENTODE

An indirectly heated R.F. Pentode for use with series or parallel heater connection on a.c. or d.c. mains. Primarily designed for use as an R.F. or I.F. amplifier in Television Receivers, it is also suitable for use as a video amplifier, mixer or synch. separator.

PHYSICAL DETAILS.

Base	...	...	B9A—Noval.
Max. Overall Length	...	...	67.5 mm. ($2\frac{3}{4}$ in.).
Max. Seated Height	...	...	60.5 mm. ($2\frac{3}{8}$ in.).
Max. Diameter	...	...	22.2 mm. ($\frac{7}{8}$ in.).
Mounting Position	...	...	Any.

BASE CONNECTIONS.

Pin 1—Cathode.	Pin 5—Heater.
Pin 2—Control Grid (g_1).	Pin 6—Shield.
Pin 3—Cathode.	Pin 7—Anode.
Pin 4—Heater.	Pin 8—Screen Grid (g_2).
	Pin 9—Suppressor Grid (g_3).

HEATER.

Heater Voltage	...	...	6.3 volts.
Heater Current	...	...	0.3 amp.

RATINGS.

Max. H.T. Supply Voltage	...	550 volts.
Max. Anode Voltage	...	300 volts.
Max. Screen Voltage	...	300 volts.
Max. Anode Dissipation	...	2.5 watts.
Max. Screen Dissipation	...	0.7 watts.
Max. Cathode Current	...	15 mA.
Max. V_h -k	...	150 volts.
Max. R_{g_1} -k (fixed bias)	...	0.5 M Ω
Max. R_h -k	...	20 k Ω
*Max. Negative Grid Voltage	...	-1.3 volts.

CHARACTERISTICS.

Anode Voltage	...	170	200 volts.
Screen Voltage	...	170	200 volts.
Suppressor Grid Voltage	...	0	0 volts.
Grid Voltage	...	-2	-2.5 volts.
Anode Current	...	10	10 mA.
Screen Current	...	2.5	2.6 mA.
Mutual Conductance	...	7.4	7.1 mA/V.
Anode Impedance	...	400	550 k Ω
Inner μ	...	50	50
Input Damping (at 50 Mc/s.)	...	10	12 k Ω
Equivalent Noise Resistance	...	1.0	1.1 k Ω

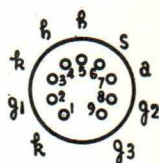
CAPACITANCES.

C_{in} (g_1)	...	...	7.0 pF.
C_{in} (g_1)	...	...	5.4 pF.
C_{out}	...	...	3.0 pF.
C_{a-g_1}	...	...	<0.007 pF.
C_{a-k}	...	...	<0.01 pF.
$C_{g_2-g_1}$	...	...	2.6 pF.
C_{g_1-h}	...	...	<0.15 pF.

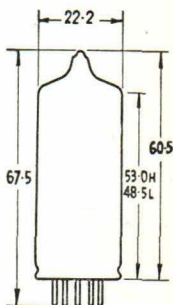
*For grid current of $+0.3 \mu A$.

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6BX6



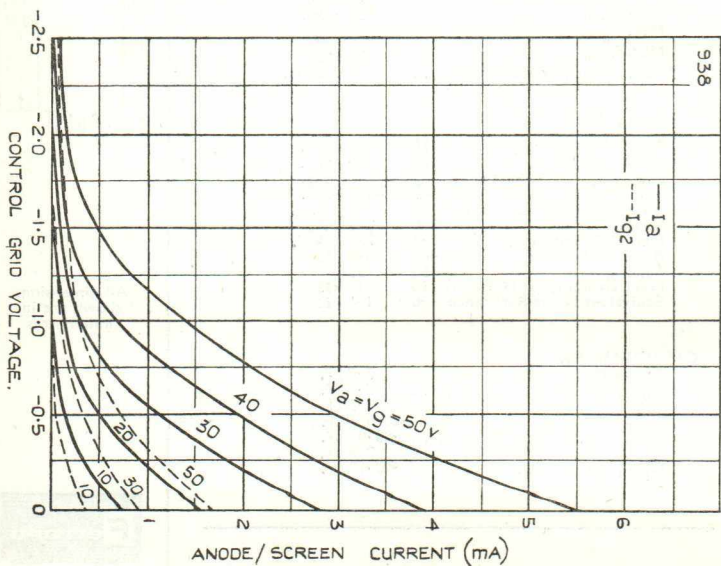
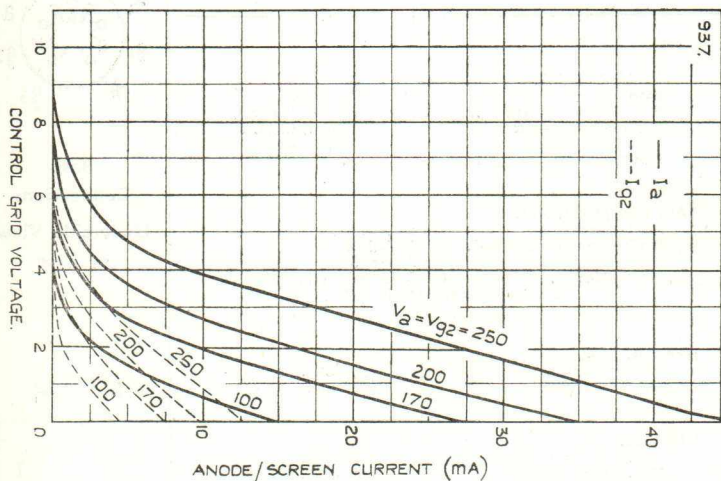
Base
Connections
Underside View
of Base

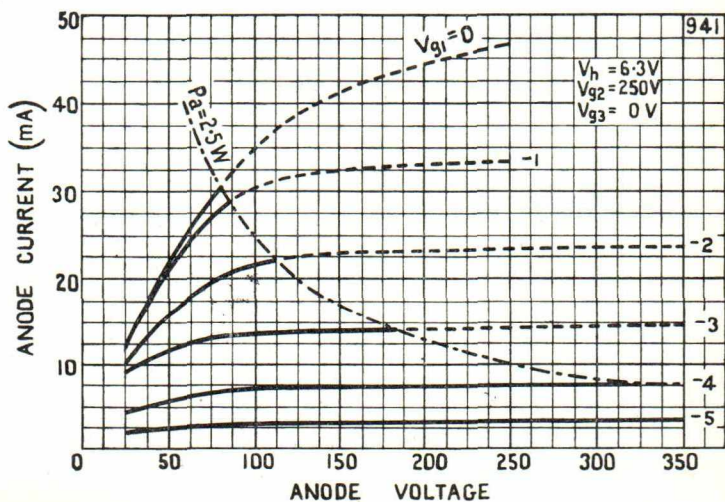
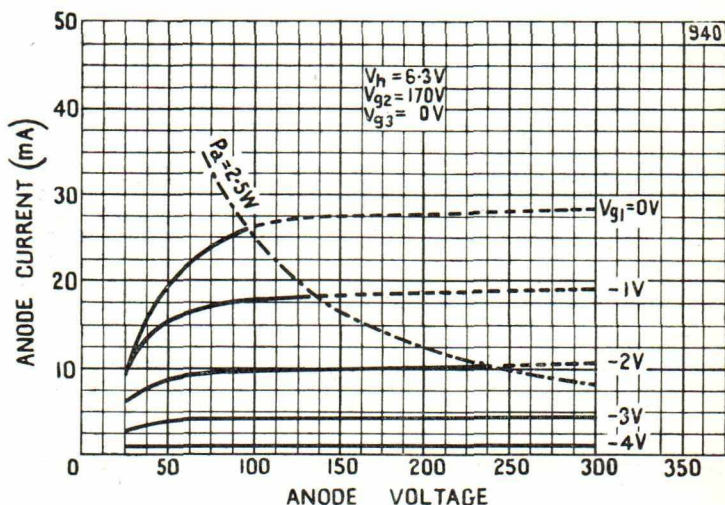


All dimensions
shown are in
millimetres

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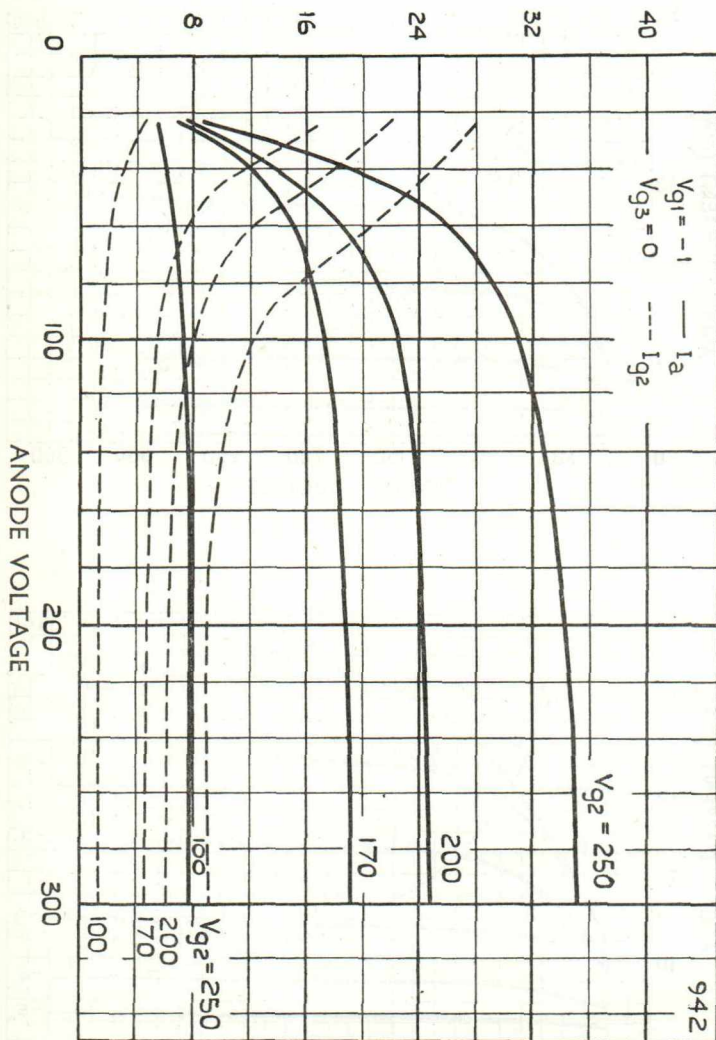


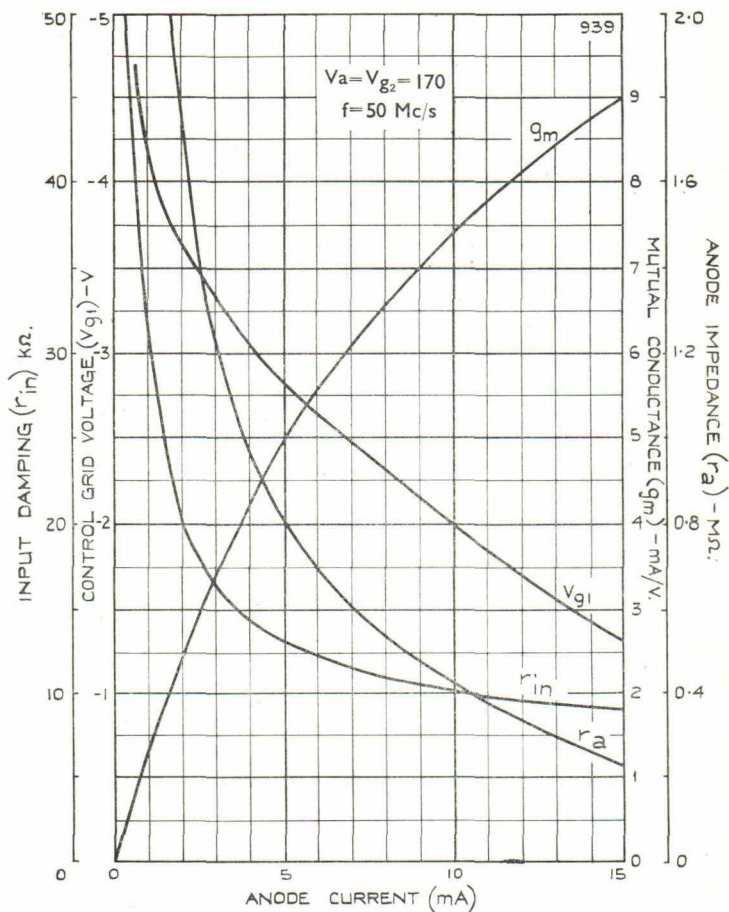


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ANODE or SCREEN CURRENT (mA.)





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