



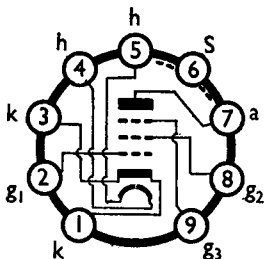
**MINIATURE
R. F. PENTODE
6.3V INDIRECTLY HEATED**

Z719
MARCH, 1954

A High Slope RF Pentode with High Input Impedance at radio frequencies.

BASE CONNECTIONS AND VALVE DIMENSIONS

Base: B9A
Bulb: Tubular



View from underside
of base.

Max. overall length: 67.5 mm.
Max. seated length: 60.5 mm.
Max. diameter: 22.2 mm.

RATING

V_h	6.3		V
I_h	0.3	approx.	A
$V_{a(b)*}$	550	max.	V
V_a	300	max.	V
$V_{g2(b)*}$	550	max.	V
V_{g2}	300	max.	V
v_{h-k}	150	max.	V
p_a	2.5	max.	W
p_{g2}	0.7	max.	W
g_m	at $V_a = V_{g2} = 170$, $I_a = 10\text{mA}$	7.4	mA/V
r_a		0.4	MΩ
μ_{g1-g2}		50	
$R_{eq. \text{ noise}}$	1000		Ω
$R_{in} \uparrow$	14		kΩ
$c_{g1-k} \uparrow$	11.2		pF

* With $I_a = 0$, $I_{g2} = 0$.

† Taken at $f = 45 \text{ Mc/s}$ with both cathode tags strapped as in Fig. 1. A small variation in cathode wiring can alter the value of R_{in} .

CAPACITANCES (of an unscreened valve)

$c_{g\text{-all}}$ 7.5 pF

$c_{a\text{-all}}$ 3.3 pF

c_{a-g1} 0.006 pF

MOUNTING

Any position.

SCREENING

A separate external screening canister should be used. The internal and external surfaces of the canister should be blackened.

RETAINING

It is recommended that a retaining device is used.

MARCONI'S WIRELESS TELEGRAPH COMPANY LIMITED

Head Office : Marconi House, Chelmsford · Telephone : Chelmsford 3221 · Telegraphic Address : Expanse, Chelmsford

VENTILATION

The temperature of the hottest part of the bulb must not exceed 250°C.

MICROPHONY

This type is free from microphony in normal receiver application.

NOTE.— To obtain the values of R_{in} quoted, the above circuit must be used. The following points being important.

- (1) Cathode pins 1 & 3 must be connected by a straight wire.
 - (2) All input circuit returns to be taken direct to one of these pins.
 - (3) All output circuit returns to be taken direct to the other pin.
- Fixed bias is not important, and the values of C used must be large enough to give satisfactory de-coupling at the frequencies involved.

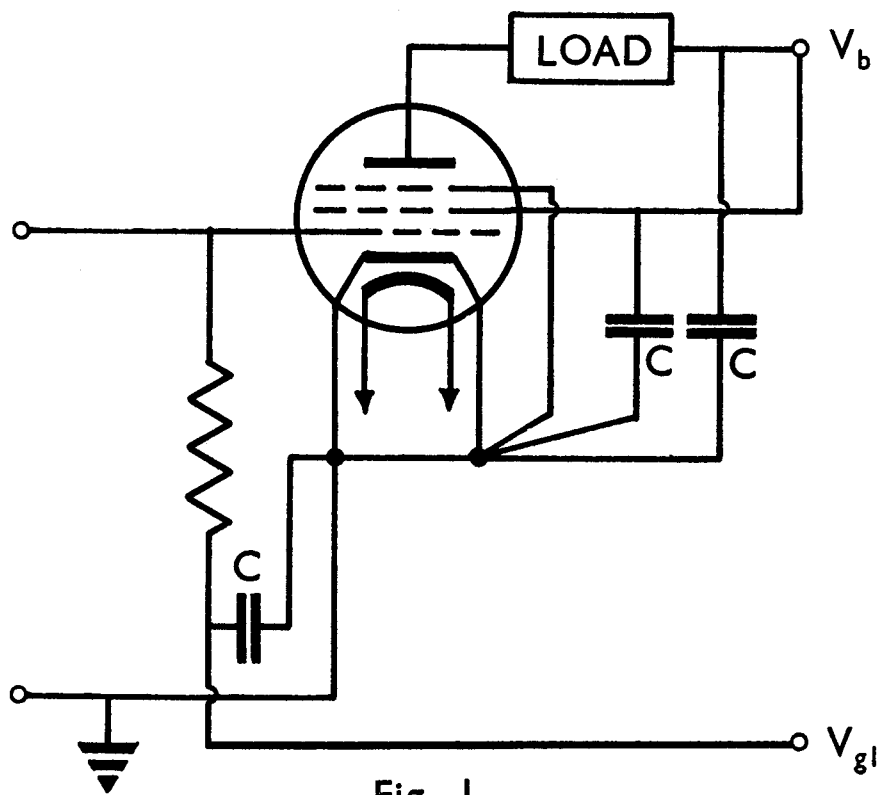
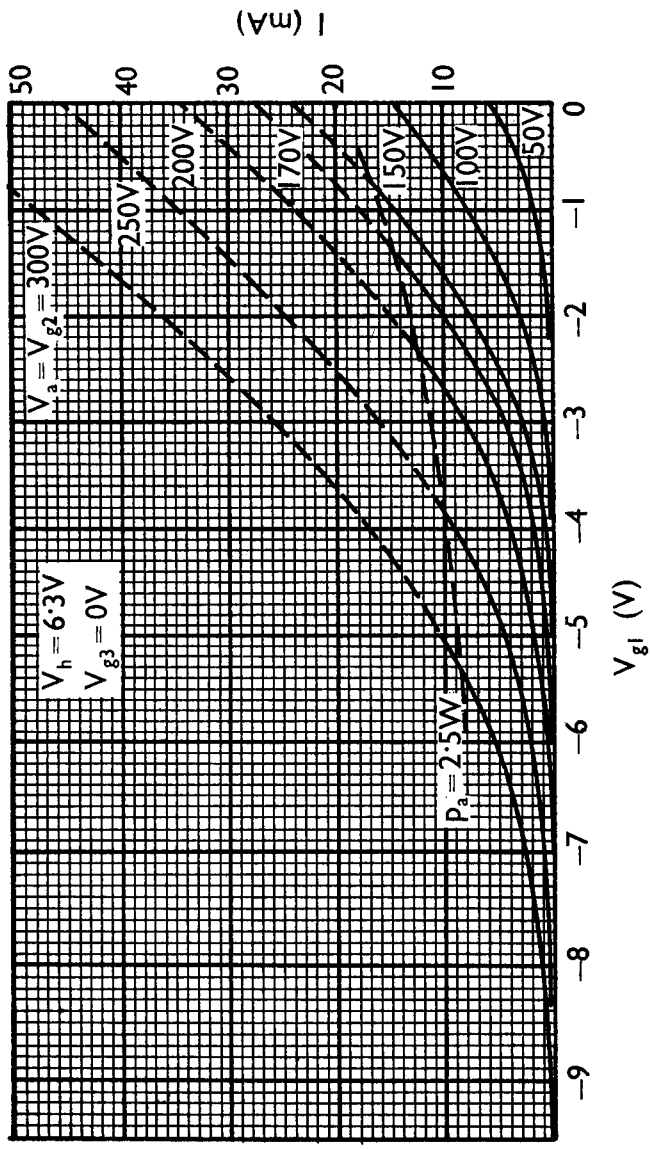
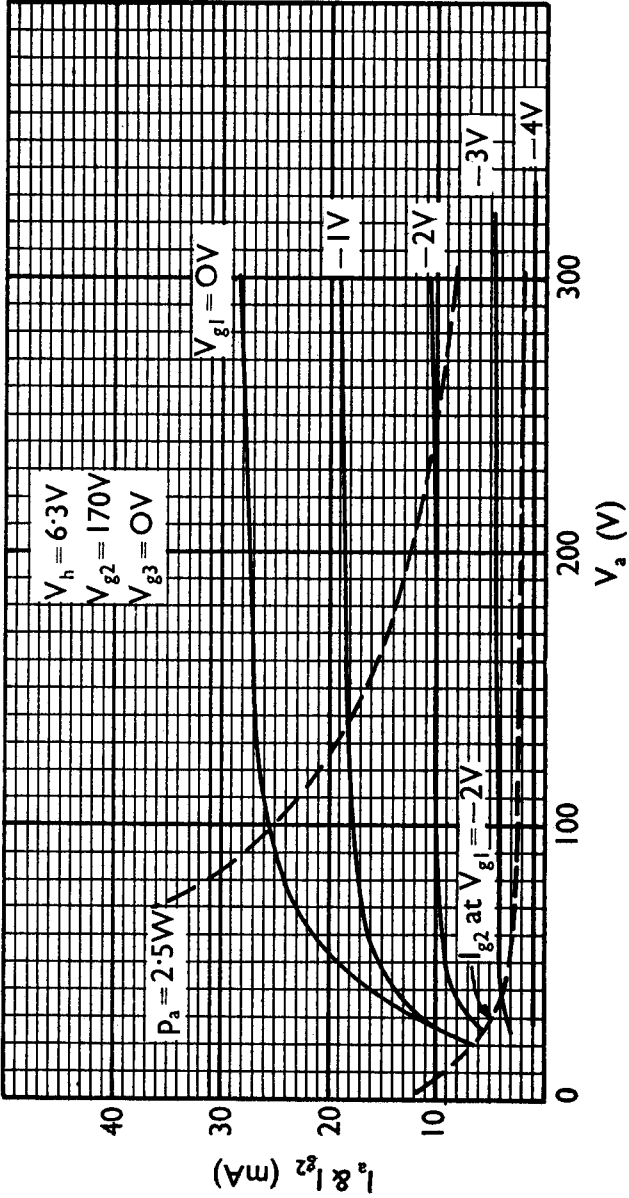
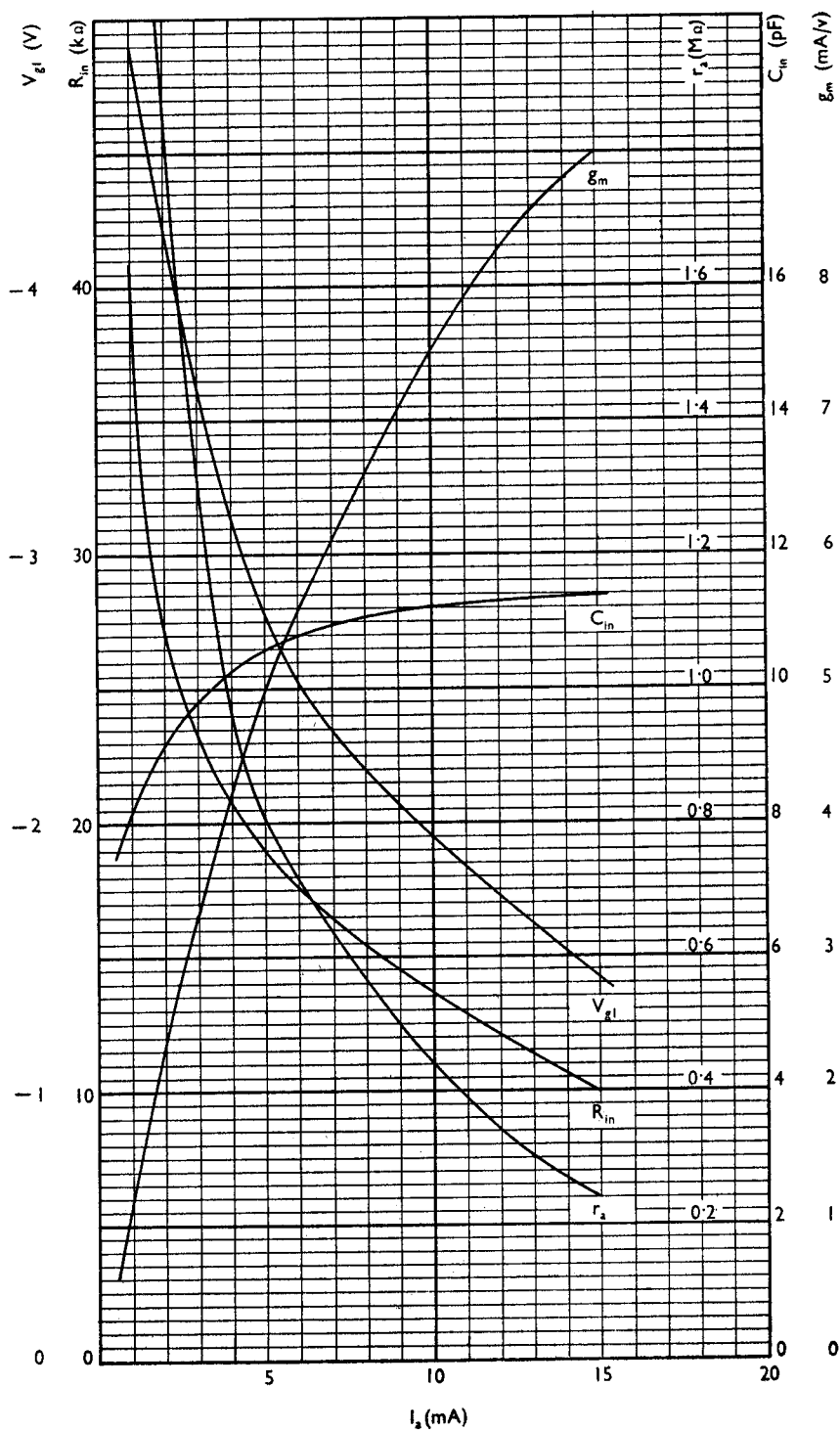


Fig. 1.







$V_h = 6.3V$ $V_a = 170V$ $V_{g2} = 170V$ $f = 45Mc/s$

