


  
VALVES

## W107 VARIABLE-MU SCREENED PENTODE

**DESCRIPTION**

Type W107 is a variable-mu H.F. pentode mounted on the miniature B7G all-glass base. It is designed for series heater operation.

**RATINGS**

	Pentode Connection	Triode Connection	
Heater Current	0.1	0.1	amp
Heater Voltage	12.6	12.6	volts
Cathode Current	12	12	mA
Anode Voltage	250	250†	max. volts
Screen Grid Voltage	250	—	max. volts
Anode Dissipation	2.5	3†	max. watts
Screen Grid Dissipation	0.5	—	max. watt
Impedance*	0.5	0.01	megohm
Mutual Conductance*	2.5	3	mA/V
Amplification Factor*	... ...	30	

\* Measured at  $V_a = V_{g_2} = 200$ ;  $V_{g_1} = -2.5$ .

† Combined Anode and Screen ratings.

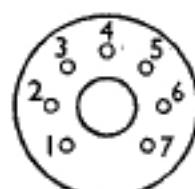
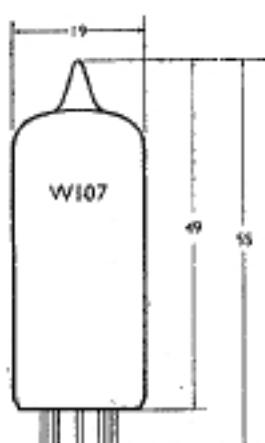
**Capacitances** (taken on screened valve) :

Anode to all other electrodes	...	...	...	...	...	7	approx. pF
Grid to all other electrodes	...	...	...	...	...	4.2	" "
Anode to Grid	...	...	...	...	...	0.006	" "

**OPERATING CONDITIONS****Class A Amplifier—Pentode Connection**

Anode Voltage	...	...	...	...	200	200	volts
Screen Grid Voltage	...	...	...	...	200	200	volts
Suppressor Grid Voltage	...	...	...	...	0	0	volts
Control Grid Voltage	...	...	...	...	-2.5	-2.7	volts
Anode Current	...	...	...	...	8	7.7	mA
Screen Grid Current	...	...	...	...	2	1.9	mA
Cathode Bias Resistor	...	...	...	...	250	270	ohms

The effective external grid-to-cathode resistance should not exceed 4 megohms.

**DIMENSIONS**

View looking on underside of base.

**BASE****B7G**

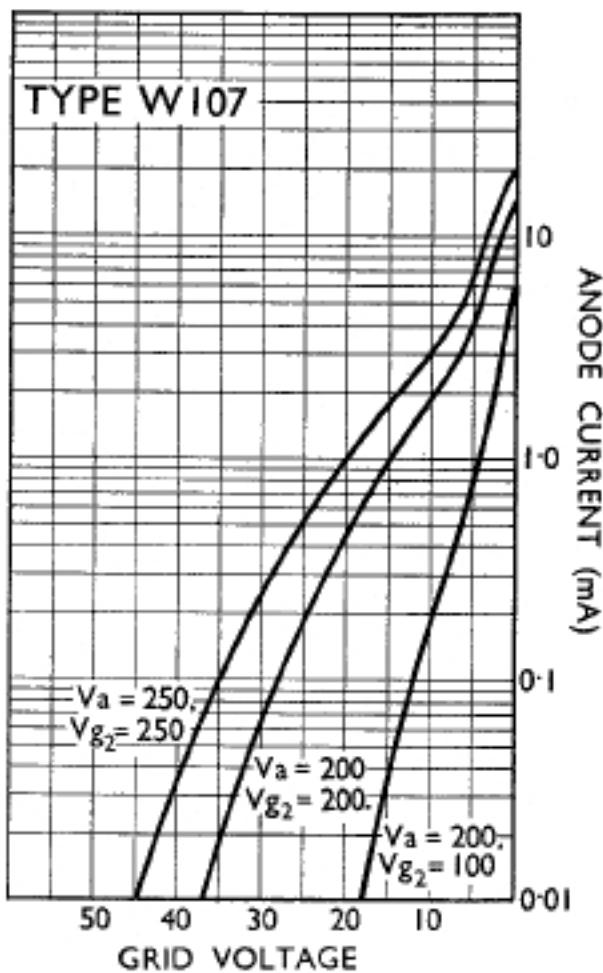
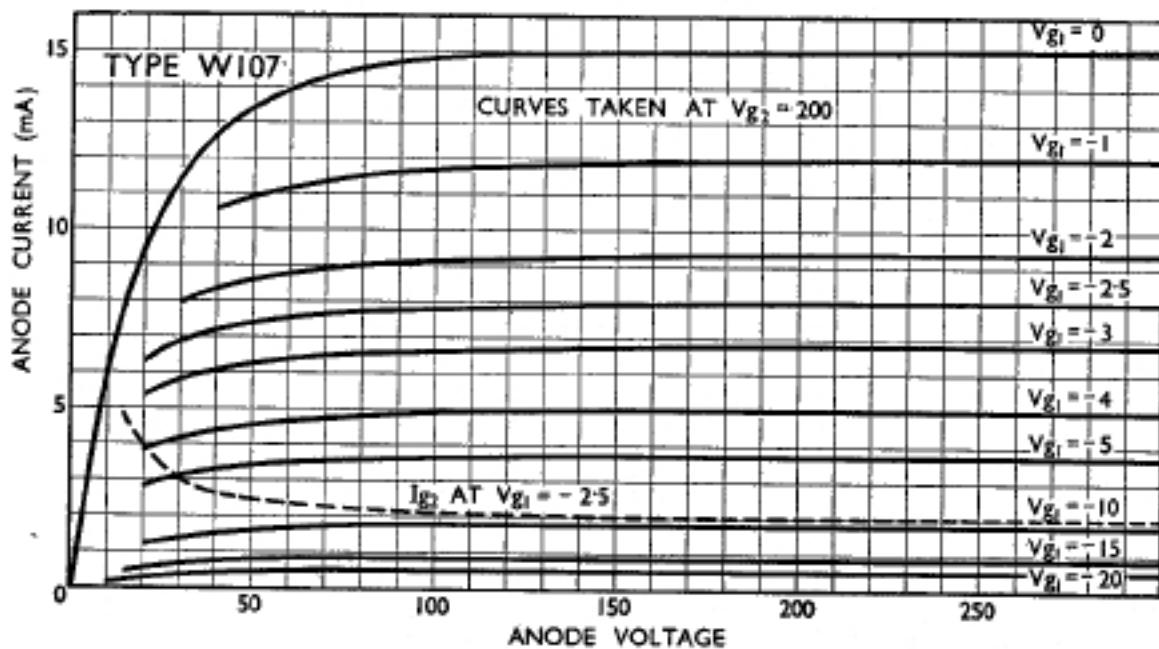
- Pin 1 : Control Grid,  $g_1$
- 2 : Cathode
- 3 : Heater
- 4 : Heater
- 5 : Anode
- 6 : Suppressor Grid,  $g_3$
- 7 : Screen Grid,  $g_2$

All dimensions are in mm. and are the maximum except where otherwise stated.

**SCREENING.** No internal or external screening is fitted to the valve.

**MOUNTING.** Any position.

# TYPE W107



CHARACTERISTIC CURVES OF AVERAGE VALVE.