


  
VALVES

## W61 VARIABLE-MU SCREENED PENTODE

**DESCRIPTION**

Type W61 is an indirectly heated variable-mu screened pentode suitable for use in radio frequency amplifiers. The W61 is a direct replacement of the earlier valve KTW61.

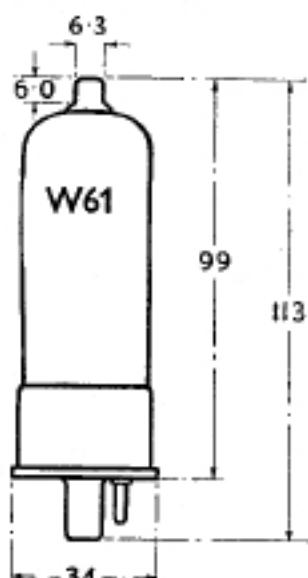
The valve has a high mutual conductance/total cathode current ratio resulting in a high signal-to-noise ratio, and also is capable of a high stage gain.

**RATINGS**

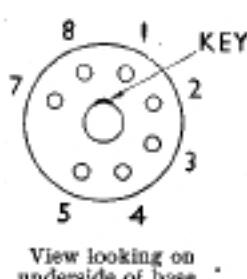
Heater Voltage	...	...	...	...	...	...	6.3	volts
Heater Current	...	...	...	...	...	...	0.3	approx. amp
Heater/Cathode Voltage	...	...	...	...	...	...	150	max. volts
Anode Voltage	...	...	...	...	...	...	250	max. volts
Screen Voltage	...	...	...	...	...	...	100	max. volts
Mutual Conductance at $V_{g1} -3$	...	...	...	...	...	...	2.9	mA/V
at $V_{g2} -25$	...	...	...	...	...	...	0.02	mA/V
Anode Impedance	...	...	...	...	...	...	0.6	megohm

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

Control Grid to all other electrodes	...	...	...	...	...	7	approx. pF
Anode to all other electrodes	...	...	...	...	...	9.5	" "
Control Grid to all other electrodes	...	...	...	...	...	0.002	" "

**DIMENSIONS**

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

**BASE**

7-PIN OCTAL	
Pin 1:	Base Shell (Metallising)
2:	Heater
3:	Anode
4:	Screen Grid
5:	Suppressor Grid
6:	Omitted
7:	Heater
8:	Cathode
Top Cap: Control Grid	

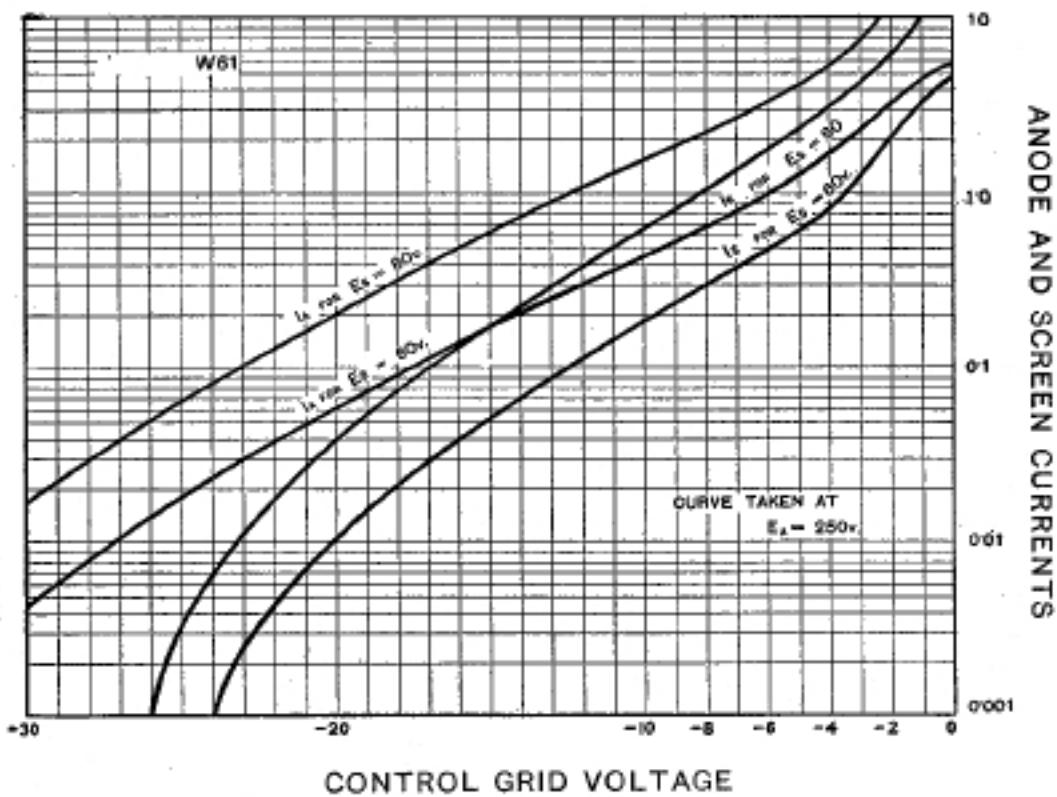
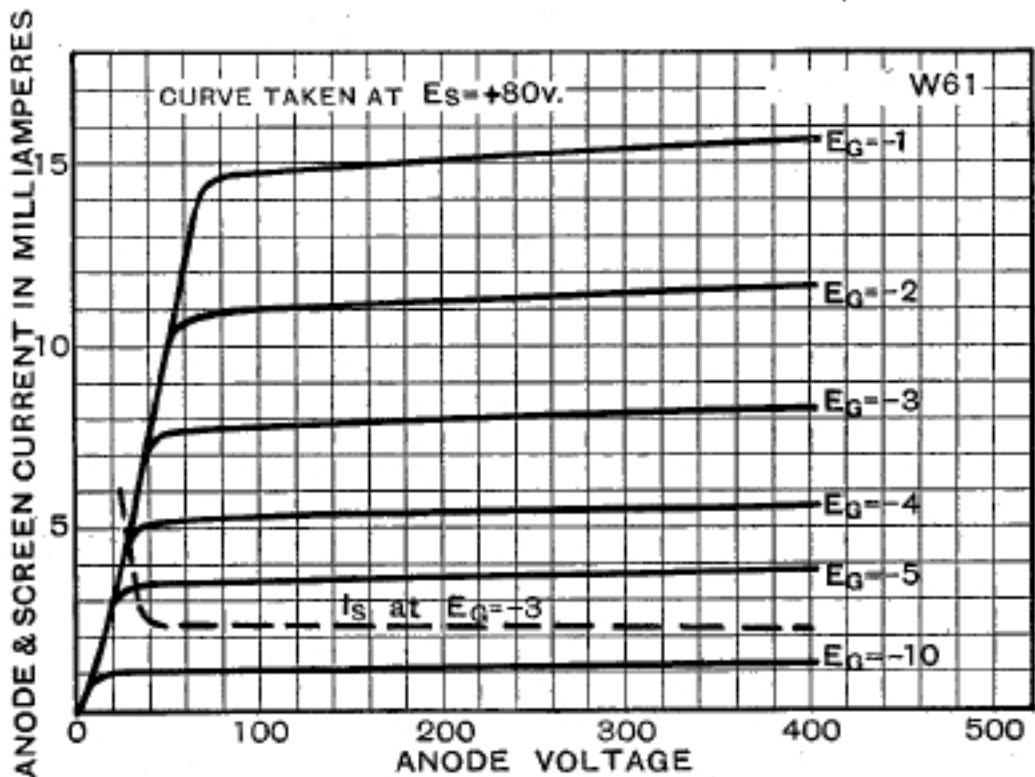
Type W61 is supplied plain or metallised.

**OPERATING CONDITIONS**

Anode Voltage...	...	250	250	volts	
Screen Voltage	...	100	80	80	volts
Control Grid Voltage ...	-3	-3	-25	volts	
Anode Current (Average)	10	8.5	.05	mA	
Screen Current (Average)		2.8		mA	
Fixed Bias Resistor	250	300		ohms	

For constant screen voltage conditions a potentiometer network should be employed. The valve may be operated with series screen feed to obtain a higher output voltage, if desired. In this case a series screen dropping resistance of 77,000 ohms may be used. The total effective resistance between the grid and cathode must not exceed 4 megohms.

# TYPE W61



CHARACTERISTIC CURVES OF AVERAGE VALVE.