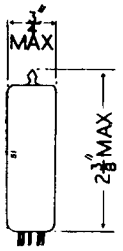
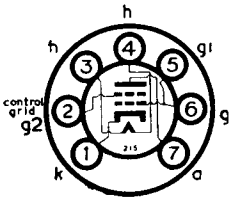


Current Equipment Type

TYPE 12K5
MINIATURE OUTPUT TETRODE



The BRIMAR 12K5 is a miniature tetrode with a space charge grid, g_1, the control grid being g_2. The valve is intended for use as a driver stage in A.F. applications in car radio receivers and will operate directly from the 12-volt battery without the use of vibrator H.T. system. It is designed to operate over the range of voltage variation normally encountered with car batteries.

RATINGS

Heater Voltage	12.6 volts
Heater Current	0.45 amp.
Anode Voltage	30 volts max.
Control Grid (g_2) Voltage	—20 volts max.
Control Grid Circuit Resistance	2.2 megohms max.
Space Charge Grid (g_1) Voltage	16 volts abs. max.
Space Charge Grid Supply Voltage	30 volts max.
Heater-Cathode Voltage	±30 volts max.

OPERATING CHARACTERISTICS

Anode Voltage	12.6 volts
Space Charge Grid Voltage	12.6 volts
Control Grid Voltage	—2 volts
Anode Current	8 mA
Space Charge Grid Current	85 mA
Mutual Conductance (g_2 to a)	7 mA/V
Anode Impedance	800 ohms
Amplification Factor	5.6

TYPICAL OPERATION AS A DRIVER STAGE

Anode Voltage	12.6 volts
Space Charge Grid Voltage	12.6 volts
Control Grid Resistor *	2.2 megohms
Input Coupling Capacitor	0.1 μF
Signal Source Impedance	100 KΩ
Optimum Load	800 ohms
Anode Current, no signal	35 mA
Anode Current, maximum signal	8 mA
Power Output	35 mW
Distortion	10 per cent.

* Bias is provided by grid current rectification.