



Industrial Type
TYPE 807
(U.X. BASE)
OUTPUT BEAM
TETRODE

The BRIMAR type 807 is an indirectly heated beam tetrode for use in the output stages of large audio equipment. The valve is fitted with a low-loss base and may be used as R.F. amplifier or frequency multiplier in transmitters. Above 60 Mc/s the ratings must be reduced and at 120 Mc/s the ratings must not exceed 50 per cent. of the maximum.

RATINGS

Heater Voltage	...	...	...	...	...	...	6.3 volts
Heater Current	...	...	...	...	...	...	0.9 amp.
Anode Voltage	...	...	...	...	...	...	600 volts
Anode Dissipation	...	...	...	...	...	...	25 watts
Screen (g_2) Voltage	...	...	...	...	...	...	300 volts
Screen Dissipation	...	...	...	...	...	...	3.5 watts

} Absolute Maximum

OPERATING CHARACTERISTICS (CLASS "A")

Anode Voltage	...	...	...	...	300	500	volts
Anode Current	...	...	...	...	83	50	mA
Screen Voltage	...	...	...	...	250	200	volts
Screen Current	...	...	...	...	8.0	1.6	mA
Control Grid (g_1) Voltage	...	...	...	...	-12.5	-14.5	volts
Cathode Bias Resistor	...	...	...	...	140	280	ohms
Anode Impedance	...	...	...	...	24,000	39,000	ohms
Mutual Conductance	...	...	...	...	6.5	5.7	mA/V
Optimum Load	...	...	...	...	3,000	6,000	ohms
Power Output	...	...	...	...	6.4	11.5	watts
Harmonic Distortion	...	...	...	...	6	12	percent.

OPERATION AS PUSH-PULL AMPLIFIER (2 VALVES)

		Class AB1	Class AB2*	
Anode Voltage	...	500	600	600
Anode Current (Zero Signal)	...	100	80	60
Anode Current (Max. Signal)	...	119	150	200
Screen Voltage	...	300	300	300
Screen Current (Zero Signal)	...	2.5	1.5	1.5
Screen Current (Max. Signal)	...	16.5	17.5	21
Control Grid Voltage	...	-	-27.5	-30
Cathode Bias Resistor	...	270	-	-
Peak Input (Grid to Grid)	...	72	59	78
Optimum Load (Anode to Anode)	...	9,000	10,000	6,400
Power Output	...	32.5	47.5	80
Harmonic Distortion	...	2.7	2.2	3.5

} per cent.

* To obtain the maximum output at low distortion, the Anode and Screen supply voltages must not vary more than 5 per cent. nor the grid bias 3 per cent. between no signal and full signal conditions.

