BRIMAR VALVES

TYPE 19AQ5

R.M.A. REGISTRATION DATA

DATE ISSUED 24.7.50.

19AQ5
BEAM PENTODE

The 19AQ5 is a miniature type beam power amplifier pentode similar to the type 6AQ5. It is designed for use in A.C./D.C. medium power audio-frequency applications.

MECHANICAL DATA

Coated unipotential cathode.
Outline drawing ..... 5-3 Bulb T-5½
Base .....E7-1 miniature button 7 - pin
Maximum diameter ..... 3/4"
Maximum overall length ..... 2.5/8"
Maximum seated height ..... 2.3/8"
Pin connections ..... Basing No.7BZ

Pin 1 - Grid No. 1	Pin 5 - Plate
Pin 2 - Cathode, Grid No. 3	Pin 6 - Grid No. 2
Pin 3 - Heater	Pin 7 - Grid No. 1
Pin 4 - Heater	

Mounting position ..... any

ELECTRICAL DATA

Ratings

Heater voltage, (ac or dc)	18.9 volts
Maximum heater-cathode voltage	90 volts
Maximum plate voltage	250 volts
Maximum grid No. 2 voltage	250 volts
Maximum plate dissipation	12 watts
Maximum grid No. 2 dissipation	2 watts
Maximum external grid No. 1 circuit resistance - self bias ...	0.5 megohm
Maximum external grid No. 1 circuit resistance - fixed bias ..	0.1 megohm
Maximum bulb temperature at any point	250°C

from RTMA release #899, Sept. 5, 1950

Typical operating conditions and characteristics class A-1 amplifier

Heater voltage (ac or dc)	18.9	18.9 volts
Heater current	150	150 mA
Plate voltage	180	250 volts
Grid No. 2 voltage	180	250 volts
Grid No. 1 voltage	-8.5	-12.5 volts
Plate resistance (approx.)	58000	52000 ohms
Transconductance	3700	4100 umhos
Peak a-f signal voltage	8.5	12.5 volts
Zero signal plate current	29	45 mA
Zero signal grid No. 2 current	3	4.5 mA
Maximum signal plate current	30	47 mA
Maximum signal grid No. 2 current	4	7 mA
Load resistance	5500	5000 ohms
Total harmonic distortion (approx.)	8	8 %
Power output	2.0	4.5 watts