

**BRIMAR**

**R. E. T. M. A.  
REGISTRATION DATA**

TYPE 4EN4  
DATE 10th March '58  
ISSUED

TYPE 4EN4

The 4EN4 is a miniature medium- $\mu$  triode intended primarily for use as a radio frequency amplifier in VHF television tuners. The electrical characteristics are similar to those of each section of the 6BZ7.

MECHANICAL DATA.

Coated unipotential cathode.  
Outline drawing..... 5-2 Bulb..... T-5 $\frac{1}{2}$   
Base..... E7-1 Miniature Button 7-pin  
Maximum diameter.....  $\frac{3}{4}$ "  
Maximum overall length..... 2 $\frac{1}{8}$ "  
Maximum seated height..... 1 $\frac{1}{8}$ "  
Pin Connections..... Basing 7EG  
Pin 1 - Cathode. Pin 5 - Plate.  
Pin 2 - Grid. Pin 6 - Cathode.  
Pin 3 - Heater. Pin 7 - Grid.  
Pin 4 - Heater.  
Mounting position..... Any

ELECTRICAL DATA.Direct Inter-electrode Capacitances - with external shield.

Grid to plate: (g1 to p)..... 1.2 $\mu$ F  
Input: g1 to (h+k)..... 3.2 $\mu$ F  
Output: p to (h+k)..... 1.4 $\mu$ F  
Heater to cathode: (h to k)..... 2.8 $\mu$ F

Ratings Design Centre Values.

Heater voltage (A.C. or D.C.)..... 4.2 volts  
Maximum heater-cathode voltage.....  
Heater positive with respect to cathode..... 100 volts  
Heater negative with respect to cathode..... 100 volts  
Maximum plate voltage..... 250 volts  
Maximum positive D.C. grid voltage..... 0 volts  
Maximum plate dissipation..... 2.0 watts  
Maximum D.C. cathode current..... 20 milli  
amperes  
Maximum grid circuit resistance..... 0.5 Megohms

Typical Operating Conditions and Characteristics, class A1  
Amplifier.

Heater voltage (A.C. or D.C.).....	4.2 volts
Heater current.....	0.3 amperes
Plate voltage.....	150 volts
Cathode-bias resistor.....	220 ohms
Plate resistance (approximately).....	6300 ohms
Transconductance.....	6800 microhms
Plate current.....	9.0 milli amperes
Grid voltage, approximate.....	
I <sub>b</sub> = 100 Microamperes.....	-6 volts
Amplification factor.....	43