

# BRIMAR

## VALVES

TYPE **50CD6G**

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### R.M.A. REGISTRATION DATA

50CD6G  
BEAM POWER AMPLIFIER

The 50CD6G is an indirectly-heated line output tube, designed for AC/DC television service. The electrical characteristics, except for the heater rating, are similar to the 6CD6G.

MECHANICAL DATA.

Coated unipotential cathode  
 Outline drawing ..... 16-4      Bulb ..... ST-16  
 Base ..... B6-13  
 Maximum diameter ..... 2.1/16"  
 Maximum overall length ..... 5.11/16"  
 Maximum Seated height ..... 5.1/8 "  
 Pin connections ..... Basing Number    5BT

Pin 1 - No connection	Pin 5 - Grid No.1
Pin 2 - Heater	Pin 6 - -
Pin 3 - Cathode and Grid No.3	Pin 7 - Heater
Pin 4 - -	Pin 8 - Screen Grid

Top Cap - Anode

Mounting Position ..... Vertical, base up or down;  
 Horizontal, with pins 2  
 and 7 in a vertical plane.

ELECTRICAL DATA.

Direct Inter-electrode Capacitances (with no external shield).

Grid-Plate (max) ..... 1  $\mu$ f  
 Input ..... 26  $\mu$ f  
 Output ..... 10  $\mu$ f

RATINGS (Design Centre Values)

Heater Voltage (ac or dc) ..... 50 volts  
 Heater current ..... 0.3 amps

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50050/100

## Peak heater-cathode voltage.

- (a) Heater negative with respect to cathode ..... 350 volts  
(b) Heater positive with respect to cathode ..... 350 volts

Maximum D.C. Plate Voltage ..... 700 volts

- \* Peak positive - pulse plate voltage ..... 6000 volts  
\* Peak negative - pulse plate voltage ..... -1500 volts

Maximum Grid No.2 voltage ..... 175 volts

Maximum negative Grid No.1 voltage ..... -50 volts

Peak negative-pulse Grid No.1 voltage ..... -150 volts

Maximum plate dissipation ..... 15 watts

Maximum Grid No.2 dissipation ..... 3 watts

Maximum D.C. Plate current ..... 170 mA

Maximum Bulb temperature at any point ..... 210°C

Maximum Grid No.1 circuit resistance ..... 1.0 megohm

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS.

Heater voltage ..... 50 volts

Heater current ..... 0.3 amps

Plate voltage ..... 175 volts

Grid No.2 voltage ..... 175 volts

Grid No.1 voltage ..... -30 volts

Transconductance ..... 7500 micromhos

Plate current ..... 90 mA

Grid No.2 current ..... 5 mA

- \* The duration of the voltage pulse must not exceed 15 per cent of one horizontal scanning cycle, with a maximum duration of 10 microseconds.