

BRIMAR

VALVES

TYPE **50CD6G**DATE
ISSUED **9. 7. 51.**

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 μ f
Input	26 μ f
Output	10 μ f

RATINGS (Design Centre Values)

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

Sheet 1 of 2

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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.