

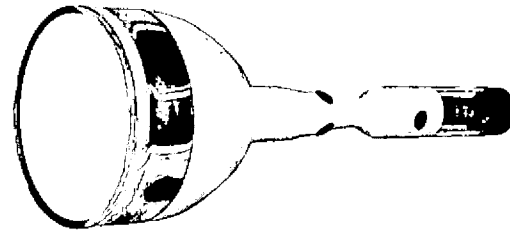
# LITTON INDUSTRIES

ELECTRON TUBE DIVISION—ELECTRONIC DISPLAY LABORATORY

1476 66TH STREET • EMERYVILLE, CALIFORNIA • OLYMPIC 8-3831



## 5CHP11 CHARACTER WRITING CRT



ELECTROSTATIC DEFLECTION FOR CHARACTER WRITING  
EQUAL DEFLECTION SENSITIVITY ON EACH AXIS  
ELECTROMAGNETIC DEFLECTION FOR CHARACTER  
POSITIONING  
COMMON DEFLECTION ZONES FOR BOTH SYSTEMS  
METALLIZED HIGHLY ACTINIC PHOSPHOR SCREEN  
ACTIVE SCREEN AREA 4¼" DIAMETER  
SCREEN VOLTAGE UP TO 30,000 VOLTS

### APPLICATIONS

Suggested applications include: high speed display of characters by beam writing techniques, especially for computer read-out photographic applications, electronic character forming, etc.

### DATA

#### GENERAL

Heater voltage (AC or DC) . . . . . 6.3 volts  
Heater current . . . . . 0.6 amperes  
Direct Interelectrode Capacitances:  
Grid #1 to all other electrodes . . . . . 8 uuf  
Cathode to all other electrodes . . . . . 5 uuf  
Phosphor Screen  
Aluminized, controlled micro particle size . . P-11  
Fluorescence . . . . . blue  
Phosphorescence . . . . . blue  
Decay rate . . . . . fast  
Focusing Method . . . . . Magnetic  
Deflection Method . . . . . Magnetic  
Deflection Angle (Approx.) . . . . . 40°  
Auxiliary Deflection Method . . . . . Electrostatic  
Auxiliary Deflection Angle (Approx.) . . . . . 10°  
Overall Length . . . . . 14⅜" ± ⅛"  
Bulb Diameter, max. . . . . 5" ± ⅛"

Minimum Useful Screen Diameter . . . . . 4¼"  
Mounting Position . . . . . Any  
Caps — recessed small cavity (JETEC No. J1-21)  
Base — small shell duodecal 7-pin  
(JETEC No. B7-51)

### \*MAXIMUM RATINGS

Screen (ultor) voltage . . . . . 27,000 DC  
Grid #2 voltage . . . . . 700 DC  
Grid #1 voltage:  
Negative bias value . . . . . 200 DC  
Positive bias value . . . . . -1 DC  
Positive peak value . . . . . 0  
Peak heater — cathode voltage:  
Heater negative with respect to cathode  
during equipment warm-up period not  
to exceed 15 seconds . . . . . 410 DC  
After equipment warm-up . . . . . 150 DC  
Heater pos. with respect to cathode . . . . . 150 DC

Electrostatic Deflection System:  
Sensitivity (equal deflection in the x and y axis)  
20 KV anode . . . . . Approx. 0.375"/1000 volts  
(±500 volts from anode)

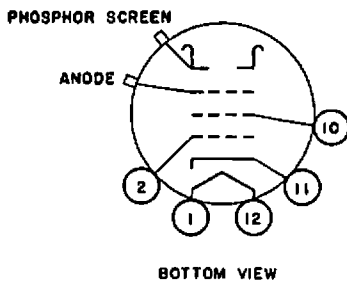
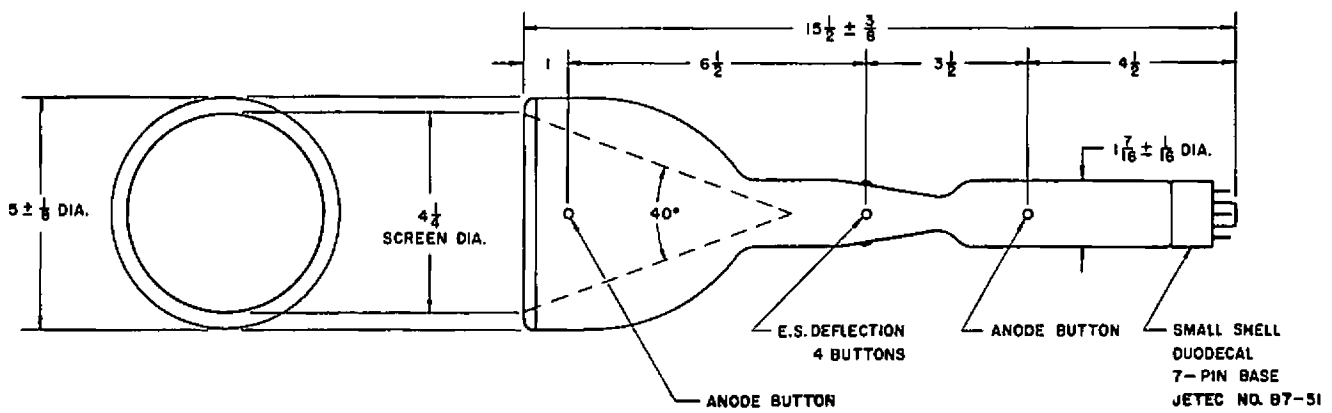
\*design-center values

### TYPICAL OPERATION

Ultor voltage . . . . . 27,000 DC  
Grid #2 voltage . . . . . 500 DC  
Grid #1 voltage for visual extinction  
of focused spot . . . . . -110 DC  
Circuit values:  
Grid #1 circuit resistance . . . . . 1.5 megs. max.

# 5CHP11 CHARACTER WRITING CRT

## DIMENSIONAL OUTLINE



- |                     |                          |
|---------------------|--------------------------|
| PIN 1 - HEATER      | PIN 11 - CATHODE         |
| PIN 2 - GRID NO. 1  | PIN 12 - HEATER          |
| PIN 10 - GRID NO. 2 | ANODE - TWO BUTTONS USED |

NOTE: FOUR SYMMETRICALLY POSITIONED BUTTONS IN NECK CONNECT TO ELECTROSTATIC DEFLECTION PLATES.