CHARACTERISTICS

GENERAL DATA
Focusing Method ........................................ Electrostatic
Deflecting Method ..................................... Magnetic
Deflecting Angles (Approx.)
Vertical ................................................. 50 Degrees
Horizontal ............................................... 65 Degrees
Diagonal .................................................. 70 Degrees
Phosphor .................................................. Aluminized, P4
Fluorescence ............................................. White
Persistence ................................................ Short to Medium
Faceplate .................................................. Gray Filter Glass
Light Transmittance (Approx.) ......................... 74 Percent

ELECTRICAL DATA
Heater Voltage ........................................... 63 Volts
Heater Current .......................................... 0.6 ± 5% Ampere
Direct Inter-electrode Capacitances (Approx.)
Cathode to All Other Electrodes ....................... 5 μf
Grid No. 1 to All Other Electrodes .................... 65 μf
External Conductive Coating to Anode4 ............. 1500 μf Max.
.......................................................... 750 μf Min.

MECHANICAL DATA
Maximum Useful Screen Dimensions .................. 11⅛ x 14 5/16 Inches
Minimum Useful Screen Area .......................... 149 Sq. Inches
Bulb Contact (Recessed Small Cavity Cap) .......... J1-21
Bulb ....................................................... J133B or J133D
Base (Small Shell Duodecal 6-Pin) ...................... B6-63
Basing ..................................................... 12L

RATINGS

MAXIMUM RATINGS (Absolute Maximum Values)
Anode Voltage ........................................... 22,000 Volts dc
Grid No. 4 (Focusing Electrode)
Voltage ................................................... −550 to +1100 Volts dc
Grid No. 2 Voltage ...................................... 700 Volts dc
Grid No. 1 Voltage
Negative Bias Value ...................................... 180 Volts dc
Negative Peak Value ................................... 220 Volts dc
Positive Bias Value ..................................... 0 Volts dc
Positive Peak Value .................................... 2 Volts
Peak Heater-Cathode Voltage ........................... Volts
Heater Negative with Respect to Cathode
During Warm-up Period
not to Exceed 15 Seconds ............................... 450 Volts
After Equipment Warm-up Period ..................... 200 Volts
Heater Positive with Respect to Cathode .......... 200 Volts

TYPICAL OPERATING CONDITIONS (Grid Drive Service)
Anode Voltage ........................................... 18,000 Volts dc
Grid No. 4 Voltage for Focus .......................... 0 to 400 Volts dc
Grid No. 2 Voltage ...................................... 300 Volts dc
Grid No. 1 Voltage Required for Cutoff2 ........... −35 to −72 Volts dc
CIRCUIT VALUES

Grid No. 1 Circuit Resistance ........................................ 1.5 Megohms Max.

NOTES:
1. External conductive coating must be grounded.
2. Visual extinction of focused raster. Extinction of stationary focused spot will require that these values be about 5 volts more negative.

WARNING:
X-ray radiation shielding may be necessary to protect against possible danger of personal injury from prolonged exposure at close range if this tube is operated at higher than the manufacturer's Maximum Rated Anode Voltage or 16,000 volts, whichever is less.

DIAGRAM NOTES:
1. Reference line is determined by the plane of the upper edge of the reference line gauge (JEDEC No. 110) when the gauge is seated on the glass cone.
2. Pin #6 aligns with horizontal centerline within 30° and is on same side as anode contact (J1-21).