GENERAL DATA

CHARACTERISTICS

Focusing Method ......................................................... Electrostatic
Deflection Method ....................................................... Magnetic
Deflection Angles (approx.)

Horizontal .............................................................. 85 Degrees
Diagonal ................................................................. 90 Degrees
Phosphor ................................................................. Aluminized P4
Fluorescence ............................................................ White
Persistence ............................................................... Short to Medium
Faceplate ................................................................. Gray Filter Glass
Light Transmittance (approx.) ........................................ 74 Percent

ELECTRICAL DATA

Heater Voltage ........................................................... 6.3 Volts
Heater Current .......................................................... 0.6 \pm 5% Ampere
Heater Warm-up Time\(^1\) .............................................. 11 Seconds
Direct Interelectrode Capacitances (approx.)
Cathode to All Other Electrodes ...................................... 5 \(\mu F\)
Grid No. 1 to All Other Electrodes .................................... 6 \(\mu F\)
External Conductive Coating to Anode\(^2\) ......................... 2500 \(\mu F\) Max.
............................................................................. 2000 \(\mu F\) Min.

MECHANICAL DATA

Minimum Useful Screen Dimensions (Maximum Assured)
Height ................................................................. 167\(\frac{1}{8}\)\text{ inches}
Width ................................................................. 217\(\frac{1}{8}\)\text{ inches}
Diagonal ............................................................... 224\(\frac{1}{8}\)\text{ inches}
Minimum Useful Screen Area ........................................ 332 \text{ sq. inches}
Bulb ................................................................. J192A or J192B
Bulb Contact (Recessed Small Cavity Cap) ....................... J1-21
Base (Small Shell Duodecal 6-Pin) .................................. B6-63
Basing ................................................................. 12L

RATINGS

MAXIMUM RATINGS (Absolute Maximum Values)\(^3\)

Anode Voltage ......................................................... 22000 Volts dc
Grid No. 4 Voltage .................................................... -550 to +1100 Volts dc
Grid No. 2 Voltage .................................................... 70 Volts dc
Cathode Voltage

Positive Bias Value .................................................. 150 Volts dc
Negative Peak Value ................................................ 0 Volts
Peak Heater-Cathode Voltage

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 (Cathode Drive Service)\(^3\)

Anode Voltage ......................................................... 18,000 Volts dc
Grid No. 4 Voltage for Focus ....................................... 0 to 350 Volts dc
Grid No. 2 Voltage .................................................... 50 Volts dc
Cathode Voltage for Cutoff\(^4\) .................................. 35 to 50 Volts dc

CIRCUIT VALUES

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

1. Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of its rated value after applying four times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to three (3) times rated heater voltage divided by rated heater current.

2. External conductive coating must be grounded.

3. This type is designed for cathode-drive service. Voltages shown are positive with respect to Grid No. 1 Voltage unless otherwise indicated.

4. For visual extinction of the undeflected focused spot.

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 C-C' of the reference line gauge (JETEC No. 116) when the gauge is seated on the glass cone.
2. External conductive coating. Coating extends to near mold match line as dimensioned, on both long sides of bulb and on the short side opposite the anode contact.
3. Pin No. 6 aligns with horizontal centerline of tube, within 30°, and is on same side as anode contact.