M A Z D A
31C2

6" MAGNETIC ALUMINISED CATHODE RAY TUBE
Indirectly heated—for Radio D.F. Compass
(High Brightness Level)

RATING

Heater Voltage (volts) \( V_h \) 4.0
Heater Current (amps) \( I_h \) 0.72
Maximum Anode Voltage (volts) \( V_{a(max)} \) 10,000*
Minimum Anode Voltage (volts) \( V_{a(min)} \) 7,500

*The maximum rating of 10kV is a design centre rating. The absolute rating of 12.5 kV maximum must not be exceeded.

INTER-ELECTRODE CAPACITANCES (pF) §

Grid 1 /all other electrodes \( c_{g,all} \) 4.7
Cathode /all other electrodes \( c_{k,all} \) 5.3

§These capacitances include a "Cinch" wafer type duodecal holder.

DIMENSIONS

Maximum Overall Length (mm) 468
Maximum Face Diameter (mm) 160
Maximum Neck Diameter (mm) 35
Approximate Nett Weight (lbs) 2\( \frac{1}{4} \)
Approximate Packed Weight (lbs) 16\( \frac{1}{2} \)

NOTES

The 31C2 Cathode Ray Tube has a concave face treated to reduce specular reflection and has an internal compass scale uniformly graduated. The 31C1 and 31C2 differ only in the manner of scale graduation.
TYPICAL OPERATION

Anode Voltage (volts) $V_a$ 9,500

Negative Grid Bias for cut-off of 140mm focused line (volts) $V_g$ 43–93

Average peak to peak modulating voltage for modulation up to 150$\mu$A (volts) 30

Maximum peak to peak modulating voltage for modulation up to 150$\mu$A (volts) 35

The heater and cathode should be connected at the same DC potential. In the case of cathode modulation it is recommended that a resistance not exceeding 100,000 ohms should be inserted between heater and cathode.

The anode circuit should include a resistance which will limit the discharge current to 100 mA max. in the event of a flash-over inside the tube.

BASE—B12A

Viewed from free end of pins.

CAP. Cavity C,T, 8.
MAZDA
31C2

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<thead>
<tr>
<th>Pin</th>
<th>Connection</th>
<th>Symbol</th>
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VALVE HOLDER—Ediswan Clix VH93/5, VH92/7, VH92/12