

MAZDA

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.

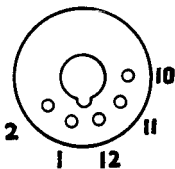
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M A Z D A**31C2****6" MAGNETIC ALUMINISED CATHODE RAY TUBE**Indirectly heated—for Radio D.F. Compass
(High Brightness Level)TYPICAL OPERATION

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 up to 150 μ A (volts)		30
Maximum peak to peak modulating voltage for modulation up to 150 μ 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.

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Industrial
VALVE & CRT DIVISION

Issue 1/3

SIEMENS EDISON SWAN LIMITED

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VALVE HOLDER—Ediswan Clix VH93/5, VH92/7, VH92/12

CONNECTIONS

Pin 1	Heater	h
Pin 2	Control Grid	g
Pin 3	No Pin	NP
Pin 4	No Pin	NP
Pin 5	No Pin	NP
Pin 6	No Pin	NP
Pin 7	No Pin	NP
Pin 8	No Pin	NP
Pin 9	No Pin	NP
Pin 10	No Internal Connection	N.C.
Pin 11	Cathode	k
Pin 12	Heater	h
CAP	Anode	a