Attention!

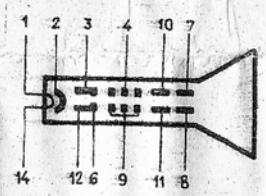
Outer metal parts of the devices designed for operation in countries of tropical climate are covered with vaseline for protection against corrosion. Before putting these devices into operation it is necessary to take that vaseline layer away.

CATHODE-RAY TUBE

3ЛОIИ

I. General

3ЛОIИ is a cathode-ray tube with electrostatic focusing and deflection having a screen with green fluorescence and mean persistence designed for visual recording of electrical processes in different radiotechnical devices.



Pin Nos	Electrodes
I	Heater
2	Cathode
3	Grid № I
4	Anode № I
5	Not connected
6	Grid № I (support)
7	Horizontal deflection plate X_I
8	Horizontal deflection plate X_2
9	Anode № 2
I0	Vertical deflection plate Y_I
II	Vertical deflection plate Y_2
I2	Grid № I (support)
I3	Not connected
I4	Heater

2. Ambient conditions

2.I. CRT is designed to withstand the following mechanical factors:

- vibration in the frequency range from I to 200 Hz with the acceleration of 49,I m/s^2 (5g);

-repeated impacts with the acceleration up to 392 m/s^2 (40g) for impact duration of 2 to I0 ms.

2.2. CRT is designed to withstand the following environmental factors:

-temperature of the air or any other gas (except for an aggressive one) from 2I3 to 358K;

-relative humidity up to 98% at the temperature of 308K;

- reduced atmospheric pressure of 53600Pa;

-increased air pressure of 297I98Pa.

3. Basic technical data

3.I. Electrical and light characteristics

Characteristics	Standard
Heater voltage, V	6,3
Heater current, A	0.27 to 0.33
Anode № I voltage, V	0 to 50
Anode № 2 voltage, V	500
Cut-off voltage, negative, V	90 to 30
Line width in the centre of the screen at the screen brightness of 5 cd/m^2, mm, no more than	0.3
Modulation voltage at the screen brightness of 5 cd/m^2, mm, no more than	28

3.2. Electrical characteristics during I500 h of operation

Line width in the centre of the screen, mm, no more than	0.4
Brightness of stray emission, cd/m^2, no more than	0.I
Modulation voltage, V, no more than	35

3.3. Maximum and minimum ratings

Heater voltage, V	5.7 to 6.9
Anode № I voltage, V, no more than	I50
Anode № 2 voltage, V	400 to 800
Cathode-heater voltage, V	from minus I25 to 0
Grid № I circuit resistance, MΩ, no more than	I.5
Voltage between any of the deflecting plates and anode № 2, V	from minus 450 to 450
Grid № I voltage, V	from minus I25 to 0.
Any deflection plate circuit impedance at the frequency of 50Hz, MΩ, no more than	2.0

3.4. Mechanical data

Weight, g, no more than	200
Tube dimensions:	
Overall length, mm, no more than	II5
Screen diameter, mm, no more than	33.5

4. Operating and handling considerations

4.I. CRT's should not be used when two or more than two parameters values are maximum ratings.

4.2. CRT's should be fixed in the equipment by means of buffering flanges.

Direct contact of CRT glass bulb with metallic parts of the equipment is not allowed.

4.3. When designing electronic equipment it is necessary to provide for automatic electron beam cut-off to prevent CRT failure when the scanning generator is not operating.

4.4. It is necessary to ensure the protection of electronic equipment against short-term flashovers of CRT's which do not cause tube failure.

5. Storage

CRT's should be stored in the producer's packing or installed into the equipment in heated storage rooms at the temperature from 278K to 3I3K and relative air humidity up to 80% at the temperature of 298K.

CRT meets the requirements of specifications.