

## Photomultiplier tube PMT-97

The photomultiplier PMT-97 has a translucent antimony-caesium photocathode with spectral characteristics in the area of 250 is 650 nm, the electrostatic focusing of electrons, 14-dynode multiplied system of louvered type, flat face optical input and reflex output; made without socle design with tough wires. The photomultiplier is used in electronic devices of general application to convert light signals into electrical.

### Technical specification

| Parameter, unit                                                                        | Standard             |         |                    |
|----------------------------------------------------------------------------------------|----------------------|---------|--------------------|
|                                                                                        | No less              | Nominal | No more            |
| Constructive dimensions                                                                |                      |         |                    |
| Diameter (max), mm                                                                     | 52                   |         |                    |
| Useful photocathode diameter, mm                                                       | 40                   |         |                    |
| Fit length, mm                                                                         | 110 <sub>-6</sub>    |         |                    |
| Weight, g                                                                              | 140                  |         |                    |
| Electrical and lighting parameters                                                     |                      |         |                    |
| Luminous photocathode sensitivity, blue, A/lm                                          | 3,5x10 <sup>-5</sup> | -       | -                  |
| Luminous anode sensitivity, A/lm                                                       | -                    | 30      | -                  |
| Supply voltage, V                                                                      | -                    | -       | 1700               |
| Dark current, A                                                                        | -                    | -       | 6x10 <sup>-8</sup> |
| Energetic resolution, %                                                                | -                    | -       | 11                 |
| Nonlinearity of luminescence characteristics in impulse regime,%                       | -                    | -       | 20                 |
| Energy equivalent of its noise, keV                                                    | -                    | -       | 2,5                |
| Instability, %                                                                         | -                    | -       | 5                  |
| Position of maximum spectral characteristics, nm                                       | 360                  | -       | 460                |
| Resistance to external factors                                                         |                      |         |                    |
| Sinusoidal vibration (vibration strength):                                             |                      |         |                    |
| - frequency range, Hz                                                                  | 1÷2000               |         |                    |
| - acceleration amplitude, m/s <sup>2</sup> (g)                                         | 100 (10)             |         |                    |
| Mechanical shock of repeated action with peak shock acceleration, m/s <sup>2</sup> (g) | 400 (40)             |         |                    |
| Operating temperature of ambient, °C                                                   | minus 60; +70        |         |                    |
| High pressure air, kPa (kgf/cm <sup>2</sup> )                                          | 294 (3)              |         |                    |
| Low working pressure, kPa (mm Hg)                                                      | 53,3 (400)           |         |                    |
| MTF, h                                                                                 | 3000                 |         |                    |



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