



**EKRAN**  
OPTICAL SYSTEMS



PMT



## Photomultiplier tube PMT-148-1

The photomultiplier PMT-148-1, used for measuring light fluxes in the area of spectra from 350 to 650 nm in the electronic devices of general application. The photomultiplier has a translucent antimony-potassium-cesium photocathode, electrostatic focusing of electrons and 12-dynode system multiplication, flat face optical input, made without socle design with flexible wires.

### Technical specification

| Parameter, unit  | Standard           |                     |                     |
|--|--------------------|---------------------|---------------------|
|  | No less            | Nominal             | No more             |
| <b>Constructive dimensions</b>   |                    |                     |                     |
| Diameter (max), mm   |                    | 40                  |                     |
| Useful photocathode diameter, mm   |                    | 25                  |                     |
| Fit length, mm   |                    | 110 <sub>-2,2</sub> |                     |
| Weight, g  |                    | 140                 |                     |
| <b>Electrical and lighting parameters</b>  |                    |                     |                     |
| Luminous photocathode sensitivity, blue, A/lm  | 5x10 <sup>-5</sup> | -                   | -                   |
| Luminous anode sensitivity, A/lm   | -                  | 100                 | -                   |
| Supply voltage, V  | -                  | -                   | 2100                |
| Dark current, A  | -                  | -                   | 5x10 <sup>-10</sup> |
| Energetic resolution, %  | -                  | -                   | 10                  |
| Energetic equivalent of intrinsic noise, keV   | -                  | -                   | 1,5                 |
| Insulation resistance, MΩ  | 10 <sup>4</sup>    | -                   | -                   |
| Nonlinearity of luminescence characteristics in impulse regime, %                      | -                  | -                   | 25                  |
| Instability, %   | -                  | -                   | 5                   |
| Maximum position of spectral characteristics, nm                                       | 380                | -                   | 440                 |
| <b>Resistance to external factors</b>  |                    |                     |                     |
| Sinusoidal vibration (vibration strength):   |                    |                     |                     |
| - frequency range, Hz  |                    | 1÷3000              |                     |
| - acceleration amplitude, m/s <sup>2</sup> (g)   |                    | 300 (30)            |                     |
| Mechanical shock of repeated action with peak shock acceleration, m/s <sup>2</sup> (g) |                    | 1500 (150)          |                     |
| Operating temperature of ambient, °C   |                    | minus 25; +55       |                     |
| High pressure air, kPa (kgf/cm <sup>2</sup> )  |                    | 264 (3)             |                     |
| MTF, h   |                    | 5000                |                     |



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