



IIT '0' Gen



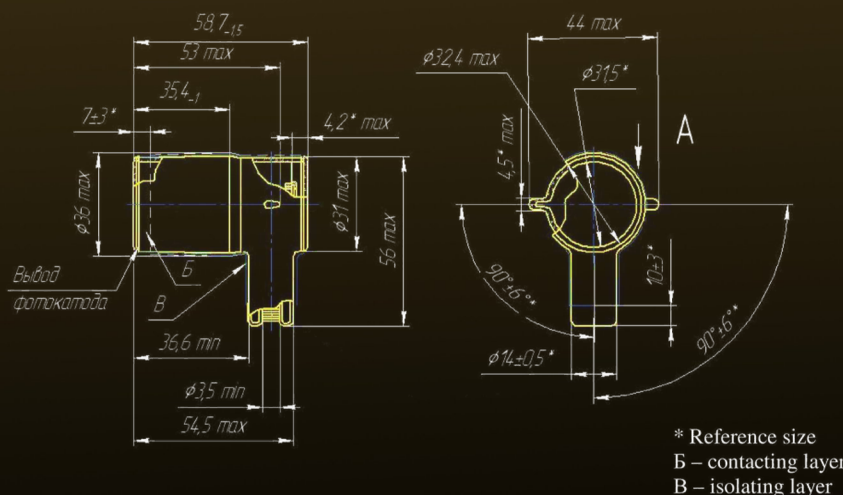
EKRAN
OPTICAL SYSTEMS



Image intensifier tube V-8-C

V-8-C – single chamber device in glass version, has a two-electrode electrostatic focusing system, multi-alkali photocathode in the area of wavelengths 350-900 nm, yellow-green color screen of luminescence.

V-8-C is a component element in the night vision devices for the brightness magnification and converting an infrared image into a visible with the using of IR illumination.



Technical specification

| Parameter, unit | Values |
|---|------------|
| Photocathode integral sensitivity with filter, mkA/lm, no less | 250 |
| Photocathode sensitivity with filter, mkA/lm, no less | 70 |
| Resolution, lm/mm, no less | 35 |
| Operating resolution, lm/mm, at 0,001 lk, no less | 26 |
| Image intensifier magnification, rel. u | 0,47 |
| Useful photocathode diameter, mm | 24 |
| Operating voltage, kV | 19 |
| MTF, h, no less | 1000 |
| Mechanical shock with peak shock acceleration, m/c ² (g) | |
| - single action | 1500 (150) |
| - reoperable | 150 (150) |
| Operating temperature, °C | -40 ÷ +40 |

Purity of the visual area (allowable dimensions of stationary dark spots):

| Zone | Form and size of zones on photocathode, mm | The greatest diameter of points, mm | | | The total area of allowable defects on the screen, mm ² |
|------|--|-------------------------------------|-----------|----------|--|
| | | Non accounted | Accounted | | |
| | | | Size | Quantity | |
| 1 | Circle Ø 12,0 | 0,03 | 0,1 | 1 | 0,008 |
| 2 | Ring Ø 12,0-19,2 | 0,05 | 0,15 | 2 | 0,036 |
| 3 | Ring Ø 19,2-24,0 | 0,15 | 0,235 | 1 | 0,0433 |