



EKRAN
OPTICAL SYSTEMS



PMT



Photomultiplier tube PMT - 173

The photomultiplier PMT-173 has a translucent antimony-potassium-sodium-cesium photocathode with spectral characteristics in the area of 300 is 850 nm, the electrostatic focusing of electrons, 12-dynode multiplied system of louvered type, flat face optical input and reflex output; made without socle design with tough wires in the balloon of low-background glass. The photomultiplier is used to convert light signals into electrical spectrometry and registration scintillation radiation in the equipment of high sensitivity.

Technical specification

Parameter, unit	Standard		
	No less	Nominal	No more
Constructive dimensions			
Diameter (max), mm	170		
Useful photocathode diameter, mm	150		
Fit length, mm	160 ₋₆		
Weight, g	750		
Electrical and lighting parameters			
Luminous photocathode sensitivity, A/lm	1x10 ⁻⁴	-	-
Spectral sensitivity of photocathode at the wavelength 410 nm, A/Wt	5x10 ⁻²	-	-
Luminous anode sensitivity, A/lm	-	10	-
Supply voltage, V	-	-	1500
Dark current, A	-	-	3x10 ⁻⁸
Energetic resolution, %	-	-	9
Energy equivalent of its noise, keV	-	-	3
Instability, %	-	-	5
Nonlinearity of luminescence characteristics in impulse regime at anode current 0,3 A, %	-	-	20
Resistance to external factors			
Sinusoidal vibration (vibration strength):			
- frequency range, Hz	1÷200		
- acceleration amplitude, m/s ² (g)	50 (5)		
Mechanical shock of repeated action with peak shock acceleration, m/s ² (g)	150 (15)		
Operating temperature of ambient, °C	minus 60; +70		
High pressure air, kPa (kgf/cm ²)	147 (1,5)		
Low working pressure, kPa (mm Hg)	53,3 (400)		
MTF, h	3000		



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