

Photomultiplier tube PMT-167

The photomultiplier PMT-167 has a translucent antimony-potassium-sodium-cesium photocathode, the electrostatic focusing of electrons, 12-dynode multiplied system of louvered type, flat face optical input and reflex output; made without socle design in the balloon of low-background (radiation net) glass.

Low-background photomultiplier is used for spectrometry and registering scintillation radiations, including nuclear facilities in the energy range 0,1÷3,0 MeV.

Photomultiplier's own background in the energy range is 0,1÷3,0 MeV - 0,6imp/s.

Technical specification

Parameter, unit	Standard		
	No less	Nominal	No more
Constructive dimensions			
Diameter (max), mm	130		
Useful photocathode diameter, mm	100		
Fit length, mm	140 ₋₆		
Weight, g	450		
Electrical and lighting parameters			
Spectral sensitivity of photocathode at the wavelength 410 nm, A/Wt	5x10 ⁻²	-	-
Luminous anode sensitivity, A/lm	-	10	-
Supply voltage, V	-	-	1650
Dark current, A	-	-	5x10 ⁻⁸
Energetic resolution, %	-	-	7,7
Energy equivalent of its noise, keV	-	-	2
Resistance to external factors			
Sinusoidal vibration (vibration strength):			
- frequency range, Hz	1÷80		
- 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	2000		



EKRAN
OPTICAL SYSTEMS

JSC «Ekran - optical systems»
630047 Russia, Novosibirsk, Dargomyzhskogo 8a

F: +7(383)325-17-58 M: info@ekran-os.ru www.ekran-os.ru