



EKRAN
OPTICAL SYSTEMS



PMT



Photomultiplier tube PMT-119

The photomultiplier PMT-119 has a translucent antimony-potassium-sodium-cesium photocathode with spectral characteristics in the area of 300 is 850 nm, the electrostatic focusing of electrons, flat face optical input, 12-dynode multiplied system of louvered type and reflex output; made in glass-to-metal shell filled with polyurethane foam dielectric housing with a flexible wires. The photomultiplier is used in radio 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		40	
Useful photocathode diameter, mm		25	
Fit length, mm		115 ₋₃	
Weight, g		180	
Electrical and lighting parameters			
Luminous photocathode sensitivity, A/lm	8×10^{-5}	-	-
Luminous anode sensitivity, A/lm	-	10	-
Supply voltage, V	-	-	1500
Dark current, A	-	-	3×10^{-10}
Energetic resolution, %	-	-	12
Energy equivalent of its noise, keV	-	-	1,5
Luminous equivalent noise of dark current, nm	-	-	$2,5 \times 10^{-13}$
Spectral sensitivity of photocathode at the wavelength 633 ₋₃₀ ⁺²⁰ , A/Wt	9×10^{-3}	-	-
Instability, %	-	-	5
Maximum position of spectral characteristics, nm	400	-	490
Resistance to external factors			
Sinusoidal vibration (vibration strength):			
- frequency range, Hz	1÷3000		
- acceleration amplitude, m/s ² (g)	200 (20)		
Mechanical shock with peak shock acceleration, m/c ² (g)			
- single action	15000 (1500)		
- repeated action	1500 (150)		
Operating temperature of ambient, °C	minus 60; +70		
High pressure air, kPa (kgf/cm ²)	294 (3)		
Low working pressure, kPa (mm Hg)	0,67 (5)		
MTF, h	3000		



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