

SPECIFICATION

DETECTOR WITH RECTANGULAR MCP 43X63, THE SECTION COLLECTOR AND SEPARATED SUPPLY



Detector is intended for the registration of the charged particles of nuclear radiation in the scientific and industrial equipment. The detector consists of MCP-stack, metal-ceramic fittings and a sectional collector. The section form corresponds to the equilateral triangle. Operating position the detector is any. The operating principle is based on the registration and amplification of the input current of the charged particles, and determination of particle impact position.

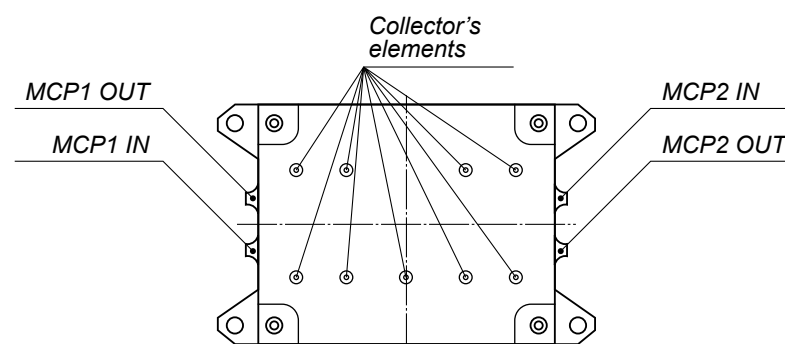
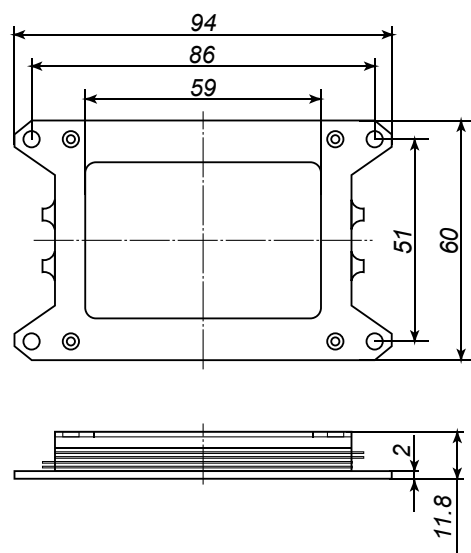
PHYSICAL CHARACTERISTICS

PARAMETER	DIMENSION	VALUE
MCP Channel Diameter	μm	12
Bias Angle	degree	7
Active Area	mm	39×59
Maximum Detector Dimensions	mm	94×60
Maximum Detector Height	mm	12
Number of MCP	-	2

ELECTRICAL PARAMETERS

PARAMETER	DIMENSION	VALUE
Minimum gain	-	1×10^7
Maximum Single-electron Amplitude Resolution	%	130
Maximum Dark Pulses Count Rate Density	pulse / s ⁻¹ × cm ⁻²	3
MCP Resistance	Ω	$5 \times 10^7 \div 2 \times 10^8$
Maximum Operating Voltage	V	2800
Vacuum ≤	Pa (Torr)	1.3×10^{-4} (1×10^{-6})

DIMENSIONAL OUTLINES



CIRCUIT DIAGRAM

