PHOTONIS ADVANCED PERFORMANCE DETECTOR

APD 2 MA 25/12/10/12 D 60:1 4.5”FM

MCP CHARACTERISTIC	SPECIFICATION
Quality Diameter:	25 mm Minimum
Center-to-Center Spacing:	12 µm Nominal
Pore Size:	10 µm Nominal
Bias Angle:	12° ± 1°
Open Area Ratio:	55% Minimum
Test/Inspection Level:	Detection Quality
DETECTOR CHARACTERISTIC	**SPECIFICATION**
Electron Gain:	$1X10^7$ Minimum @ 2400 Volts
MCP Resistance:	83-600 MΩ
Bias Current Range:	4-29 µA @ 2400 Volts
Dark Counts at Gain Voltage:	5 counts/second/cm^2 Maximum
Pulse Height Distribution @ Gain Voltage	100% Maximum
Maximum Operating Voltage	2400 Volts

Electrical characteristics are measured at the optimum MCP operating voltage (the lowest bias voltage required to attain the specified values).

The Chevron™ detector assembly contains two matched Detection Quality Advanced Performance Long-Life™ Microchannel Plates and a metal anode readout mounted in stainless steel hardware. The detector is mounted on a 4.5” CF vacuum flange with four radially mounted SHV5 connectors. The assembly is bakeable to 300°C.

Detection Quality detector assemblies are intended for use in applications where image quality is not critical. These economical devices are used as signal detectors and amplifiers and are typically used in applications such as time-of-flight mass spectrometry, residual gas analysis (RGA), or point source detectors.

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PHOTONIS
Scientific Detectors

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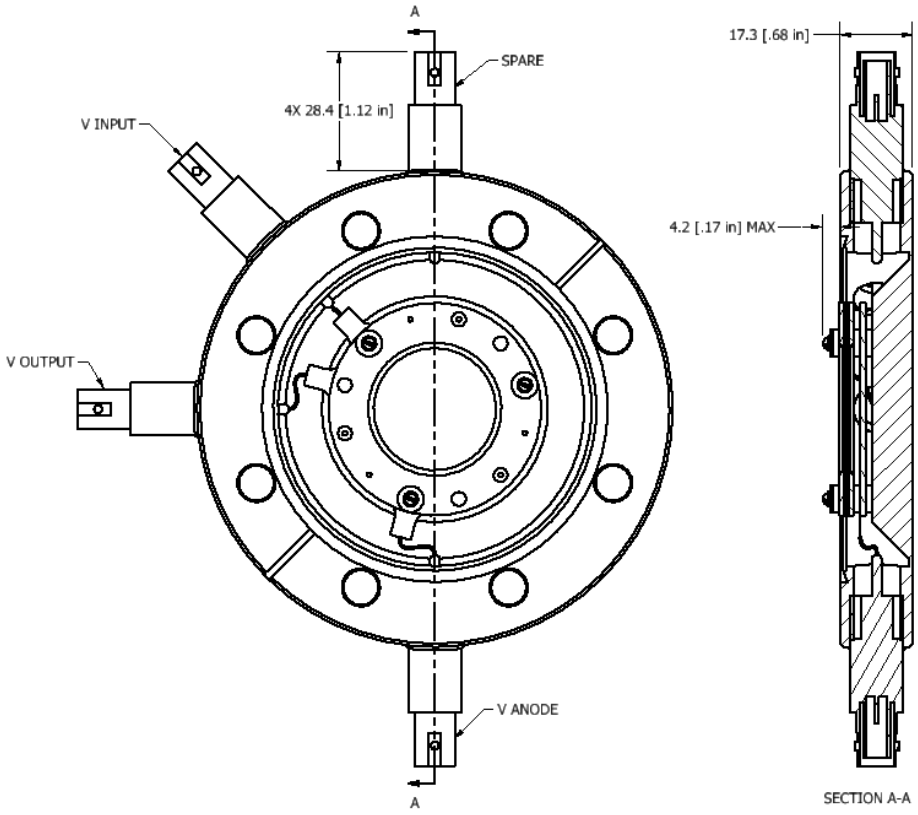

Mechanical Layout (not to scale)

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