

Photon Detector

25µm MCP-PMT
8x8 Anode
53 mm Square

Applications

- ✓ Specialized Medical Imaging
- ✓ Ring Imaging Cherenkov
- ✓ High Energy Physics Detectors

XP85012

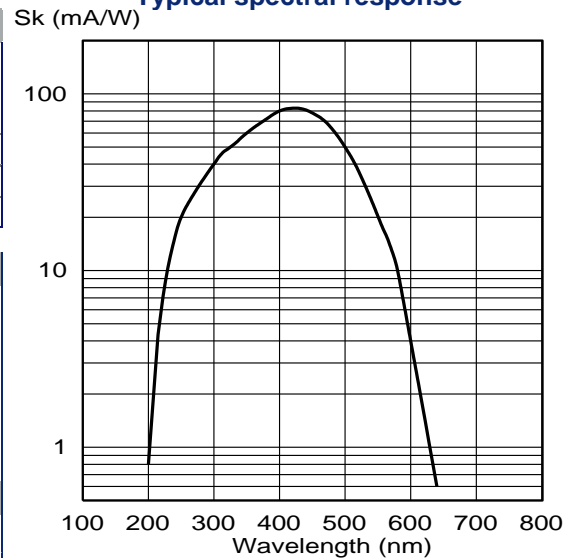
PLANACON



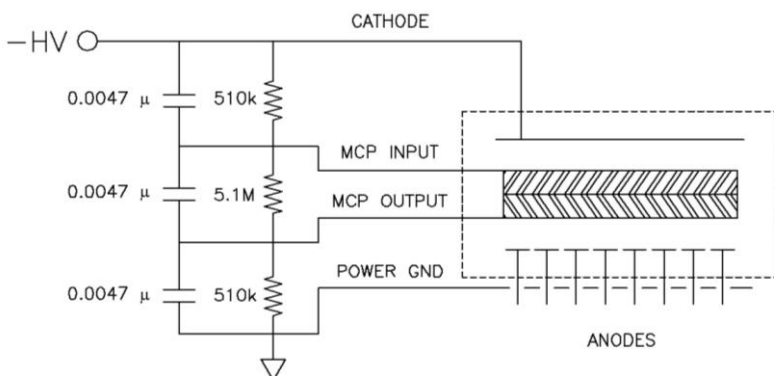
Description	
Window material	UV-Glass, Schott 8337B or equivalent
Photocathode	Bialkali
Multiplier structure	MCP chevron (2), 25 µm pore, 40:1 L:D ratio
Anode structure	8x8 array, 5.9 / 6.5 mm (size / pitch)
Active area	53x53 mm
Open-area-ratio	80%

Photocathode characteristics	Min	Typ	Max	Unit
Spectral range:	200		650	nm
Maximum sensitivity at		400		nm
Sensitivity:				
Luminous *	50	60		µA/lm
Blue *	7.5	8.5		µA/lmF
Radiant, at peak		76		mA/W
Quantum Efficiency		24		%
Characteristics	Min	Typ	Max	Unit
Gain *	1x10 ⁵	6x10 ⁵		-
Total anode dark current @ 10 ⁵ gain *		2	10	nA
Rise time		0.6		ns
Pulse width		1.8		ns

Typical spectral response

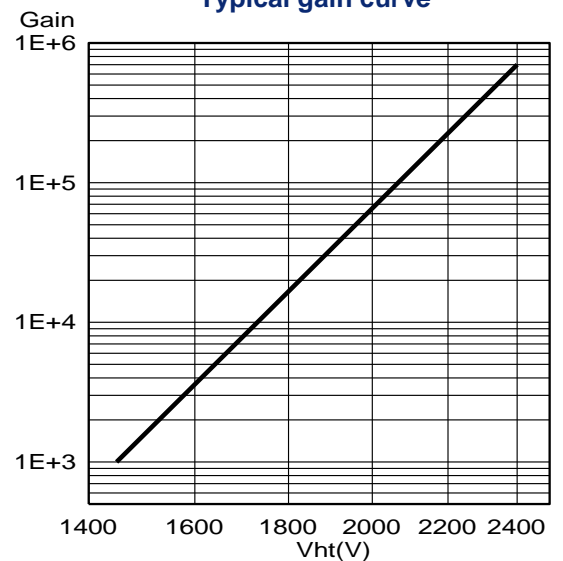


Recommended Voltage Divider (not included)



CAUTION: POWER GROUND CONNECTION AND UNUSED ANODES MUST BE CONNECTED TO GROUND FOR SAFETY AND PROPER TUBE OPERATION

Typical gain curve



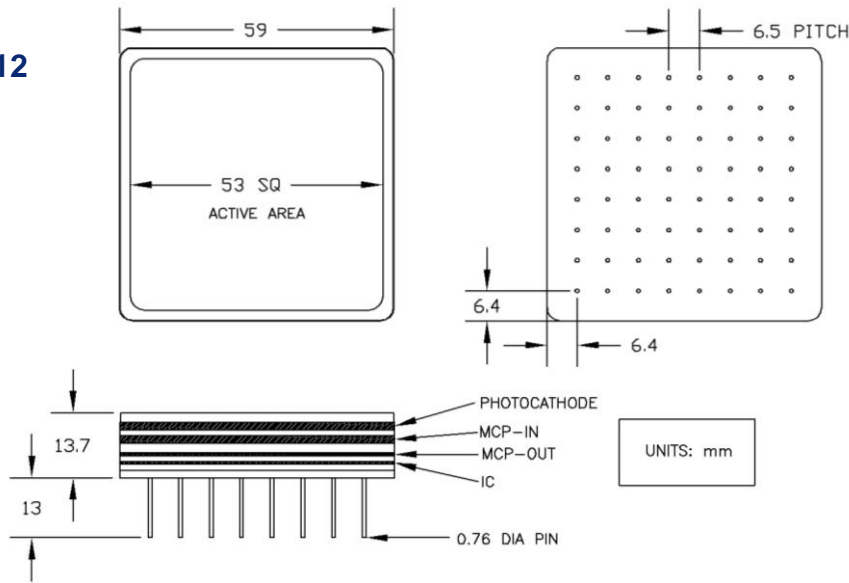
* Characteristic measured and recorded on the test ticket of each tube

Photon Detector

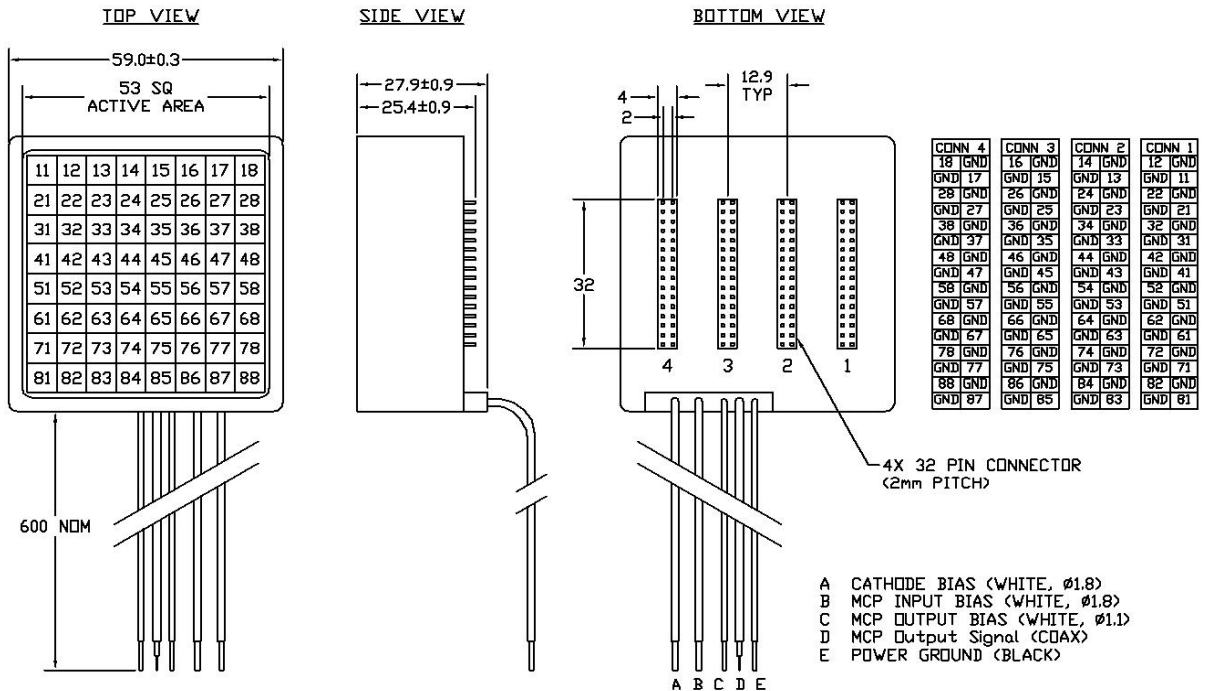
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Outline (dimensions in mm)

XP85012



XP85012/A1



Mass: ~128g

Limiting values	Min	Max	Unit
Cathode to MCP _{in} voltage		500	V
MCP _{in} to MCP _{out} voltage		2000	V
MCP _{out} to Anode voltage		500	V
Average total anode current		3	µA
Ambient temperature:			
Operating Temperature	0	+50	°C
Storage Temperature (for extended periods)	-15	+50	°C

* Warning: Continuous operation at maximum ratings may result in shorter product life or unreliable performance.

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