

Photomultiplier

Preliminary

XP85013

PLANACON

MCP-PMT, 8x8 Anode
53 mm, Square

Applications

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



Description

Window material	Borosilicate, Corning 7056 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%

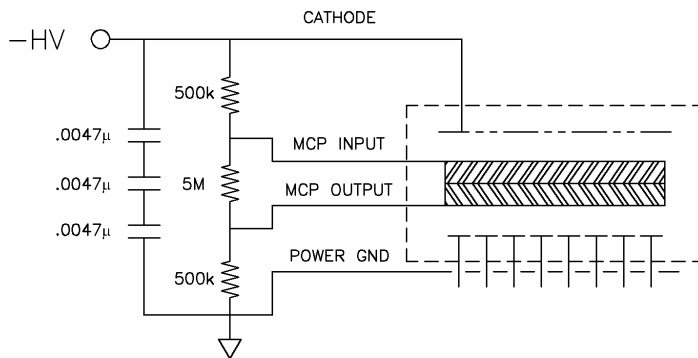
Photocathode characteristics

	Min	Typ	Max	Unit
Spectral range :	300		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 *	1×10^5	6×10^5		-
Total anode dark current @ 10^5 gain *		1	5	nA
Rise time		0.6		ns
Pulse width		1.8		ns
Anode uniformity		1 : 1.5	1 : 2.5	

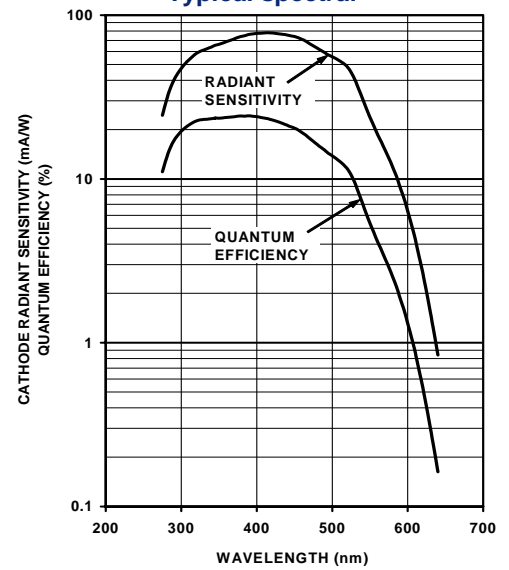
Recommended Voltage Divider (not included)



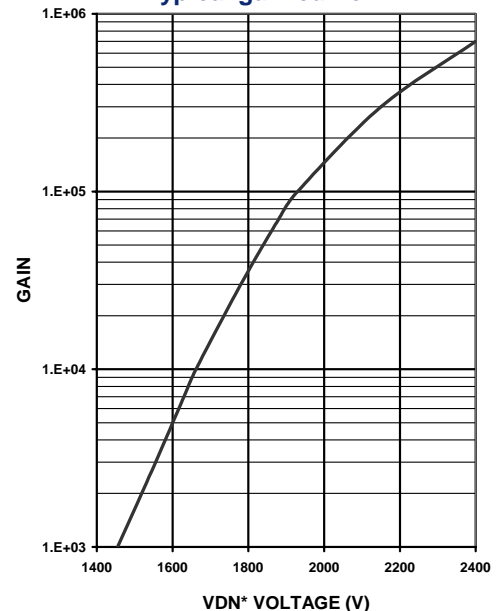
CAUTION: POWER GROUND CONNECTION AND UNUSED ANODES MUST BE CONNECTED TO GROUND FOR SAFETY AND PROPER TUBE OPERATION

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

Typical spectral



Typical gain curve

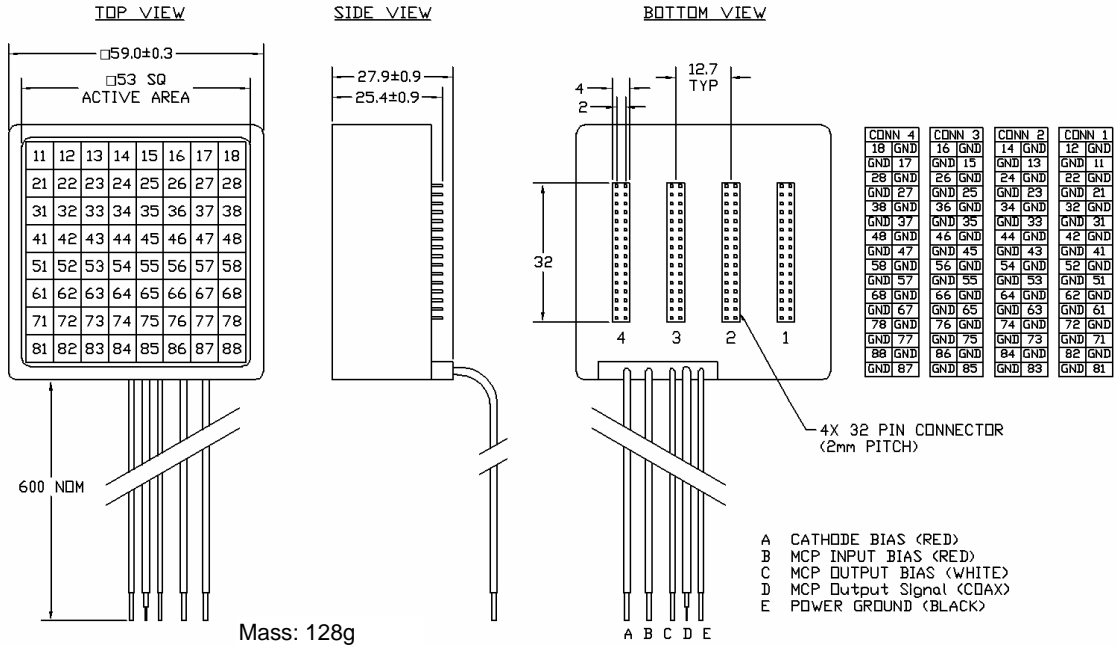


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Outline (dimensions in mm)

XP85013/F1



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.

Variants

XP85013

Finishing

/F1 with flying leads

Also, other variants can be made. Please, contact us to discuss any specific product requirements.