Photomultiplier XP85013

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

<table>
<thead>
<tr>
<th>Spectral range :</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum sensitivity at :</td>
<td>300</td>
<td>400</td>
<td>650</td>
<td>nm</td>
</tr>
</tbody>
</table>

Sensitivity :
- Luminous * :               | 50  | 60  |
- Blue * :                   | 7.5 | 8.5 |
- Radiant, at peak           | 76  |
- Quantum Efficiency         | 24  |

Characteristics

<table>
<thead>
<tr>
<th>Gain *</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total anode dark current @ 10^5 gain *</td>
<td>1</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rise time</td>
<td>0.6</td>
<td>ns</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pulse width</td>
<td>1.8</td>
<td>ns</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anode uniformity</td>
<td>1 : 1.5</td>
<td>1 : 2.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Recommended Voltage Divider (not included)

- 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.

21/05/2007
Photomultiplier XP85013

Outline (dimensions in mm)

XP85013/F1

Limiting values

<table>
<thead>
<tr>
<th>Min</th>
<th>Max</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>2000</td>
<td>V</td>
</tr>
<tr>
<td>500</td>
<td></td>
<td>V</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>µA</td>
</tr>
</tbody>
</table>

Ambient temperature:
- Operating Temperature: 0 to +50 °C
- Storage Temperature (for extended periods): -15 to +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.