

M2111测光探测器

M2111 photometric detector

本公司研发的M2111测光探测器主要应用于高能物理、体外诊断、精密测量等领域。M2111测光探测器由侧窗光电倍增管、高压电源模块及放大电路组成。本产品具有简单方便、可靠性高及探测效率高等优点，可以采用多方式（电压调节或电阻调节）控制增益。提供M2111-01和M2111-02两种型号可选。



The M2111 photometric detector developed by our company is mainly used in high energy physics, vitro diagnosis, precision measurement and other fields. M2111 photometric detector consists of side window photomultiplier tube, high voltage power supply module and amplifier circuit. The product has the advantages of simple and convenient, high reliability and high detection efficiency, and can be controlled by multiple ways (voltage regulation or resistance regulation) gain. Two models are available: M2111-01 and M2111-02.

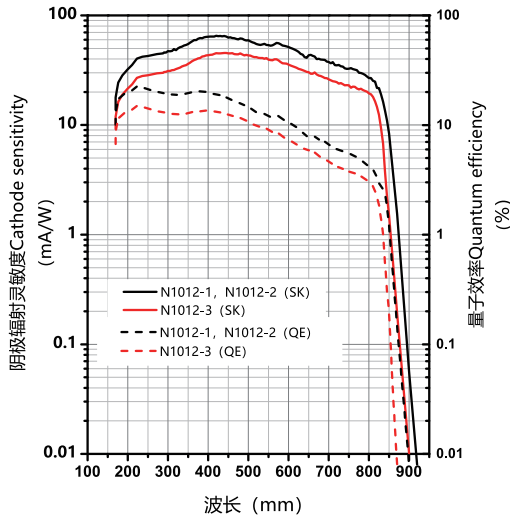
技术参数 Technical Specification

(测试环境温度25℃)

参数/Parameter		M2111-01	M2111-02	单位/Unit
输入电压/Input voltage		± 11.5~± 12.5		V
最大输入电流/Max input current		100		mA
有效面积/Effective area		8 × 24		mm
光谱响应范围/Spectral range		165-900	160-650	nm
辐射灵敏度峰值波长/Peak wavelength of radiant sensitivity		420	400	nm
控制电压/Control voltage		+2~+4.5 (输入阻抗10KΩ)		V
阴极光照灵敏度/Cathode luminous sensitivity	Typ.	250	60	μA/lm
阴极辐射灵敏度 ²⁾ Cathode radiant sensitivity	Typ.	--	25	mA/W
输出光照灵敏度 ¹⁾ Output luminous sensitivity	Typ.	1.2 × 10 ⁸	4 × 10 ⁷	V/lm
输出辐射灵敏度 ¹⁾²⁾ Output radiant sensitivity	Typ.	--	12.5	V/nW
红白比/Red and white ratio		0.3	--	--
IV变换比/IV conversion ratio		0.05		V/μA
最大线性输出电压 ¹⁾ /Maximum linear output voltage		5		V
失调电压 ¹⁾ /Offset voltage		± 2		mV
纹波噪声 ¹⁾²⁾ /Ripple noise		4		mV
频率带宽(-3dB)/ Frequency bandwidth(-3dB)		DC-500		kHz
重量/Weight		225		g
工作环境/work environment	温度/Temperature	+5~+40		℃
	湿度/Humidity Max.	90%RH		--
存放环境/Storage environment	温度/Temperature	-20~+50		℃
	湿度/Humidity Max.	93%RH		--

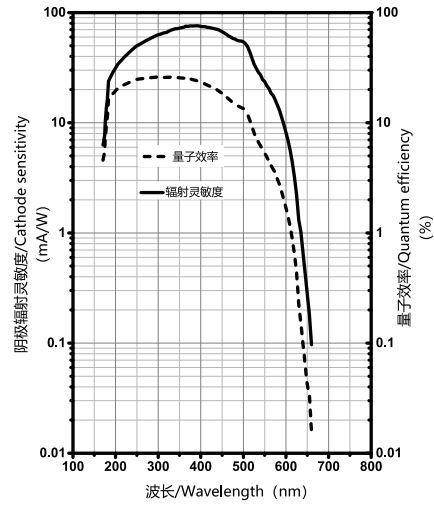
1) 控制电压: +4.0V。 2) 负载电阻1MΩ, 电容22PF测试。 3) 入射光波长: 400nm。 4) 预热时间: 30min。

1) Control voltage: +4.0V. 2) Load resistance 1MΩ, capacitance 22PF test. 3) Wavelength of incident light: 400nm. 4) Preheating time: 30min.



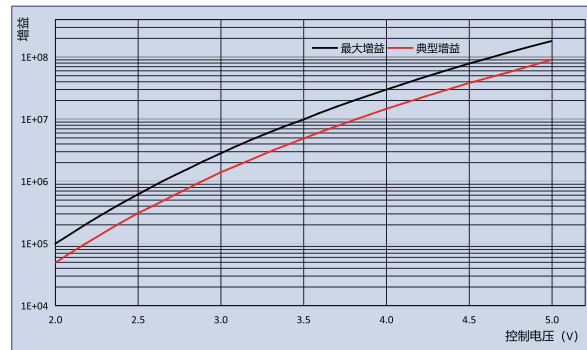
M2111-01光谱响应曲线

Typical spectral response characteristics



M2111-02典型光谱响应曲线

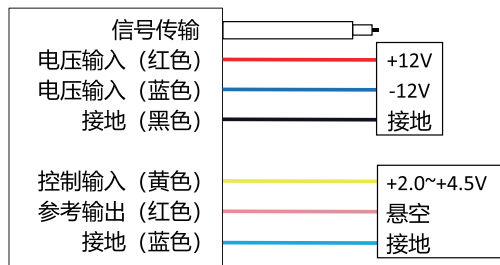
Typical spectral response characteristics



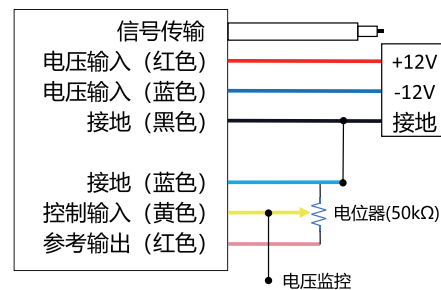
增益随控制电压变化

The gain varies with the control voltage

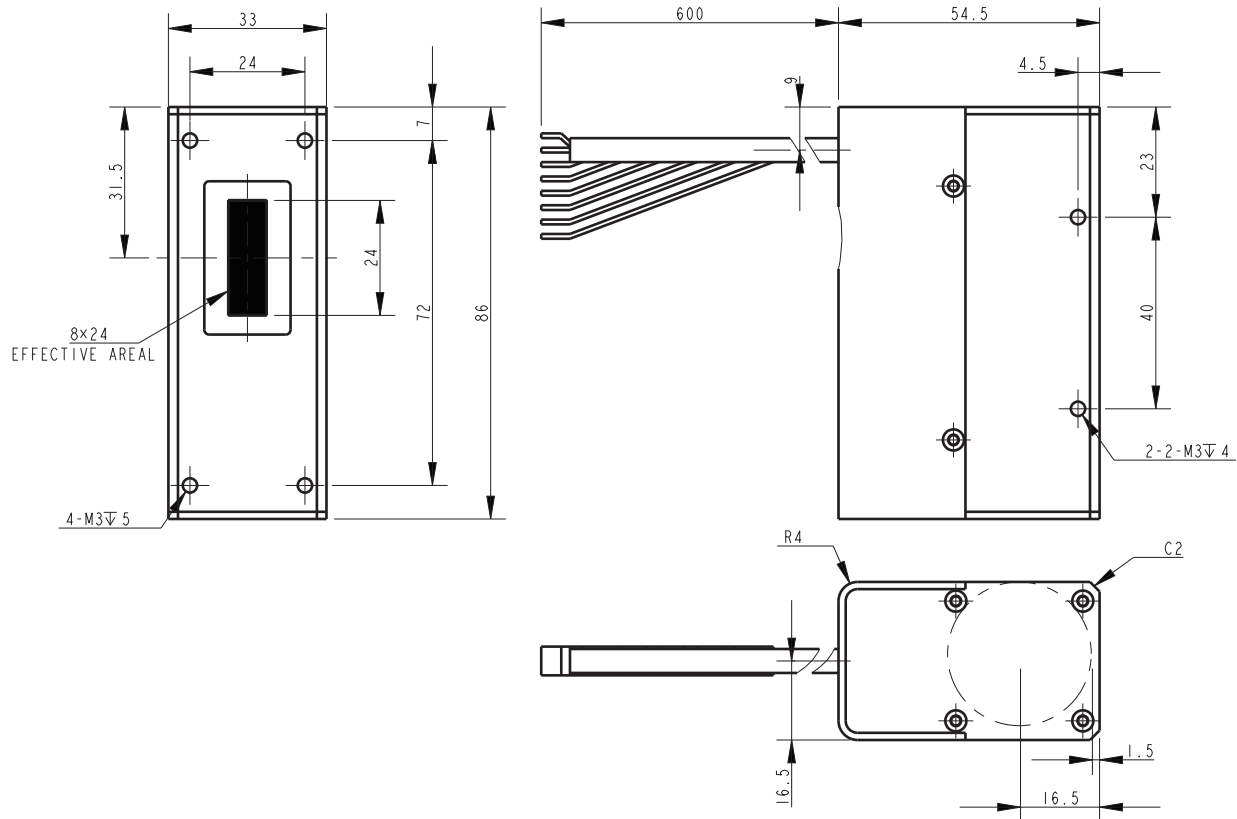
电压调节 (参考输出端需悬空)



电阻调节 (控制输入端需监控)



外形尺寸



外形尺寸图 (单位mm 线长可定制)

参数测试方法请详询厂家