

# PRELIMINARY

## H7422 MOD/H7422P MOD Specifications

### MOD:W/O COOLER, With PROTECTION CIRCUIT 50uA

#### Maximum Ratings

Parameter	-40/-50 <sup>*1</sup>	Unit
Main unit input voltage	+18	V dc
Operating temperature	+5 to +25	Cel
Storage temperature	-20 to +50	Cel
Output Current	2	μA
Control Voltage (Vcontrol)	+0.9(Input impedance for Vcont. is 100 kΩ)	V

\*1 with protection circuit / limit 50 uA

#### Specifications General

(Ta = 25 Cel)

Parameter	-40	-50	Unit
Spectral response <sup>(A)</sup>	300 to 720	380 to 890	nm
High voltage power supply and Voltage Regulator Supply voltage range	+11.5 to +15.5		V dc
High voltage power supply and Voltage Regulator Supply Current Requirement (Maximum)	62		mA
Supply Adjustable Range (Relative Sensitivity)	1:50		-
Setting Time(Sensitivity Control) <sup>*1</sup>	0.2		s
Effective Area (dia.)	5		mm
Weight (Approx.)	110		g

\*1) Stabilized time in the control voltage adjustment from +1.0 V to +0.5 V.

#### Series Characteristics

(Ta = 25 Cel)

Parameter		-40	-50	Unit
H7422 MOD	Radiant Sensitivity	at 420 nm	54	Typical × 10 <sup>-6</sup> A/nW
		at 550 nm	88	
		at 800 nm	-	
	Dark Current <sup>(A) (B)</sup>	Typical	3.35	4.1
Maximum		9.35	11.6	
H7422P MOD	Radiant Sensitivity	at 420 nm	108	Typical × 10 <sup>-6</sup> A/nW
		at 550 nm	176	
		at 800 nm	-	
	Dark Count <sup>(B) (C)</sup>	Typical	6000	7500
Maximum		18000	22500	
Induced Ripple in Signal		0.6		Maximum mV p-p
Anode Pulse Rise Time <sup>(A)</sup>		1.00		ns
Recommended Control Voltage Range Vcontrol		+0.50 to +0.80		V

(A) Control Voltage : +0.8 V ; Temperature control at 25 Cel.

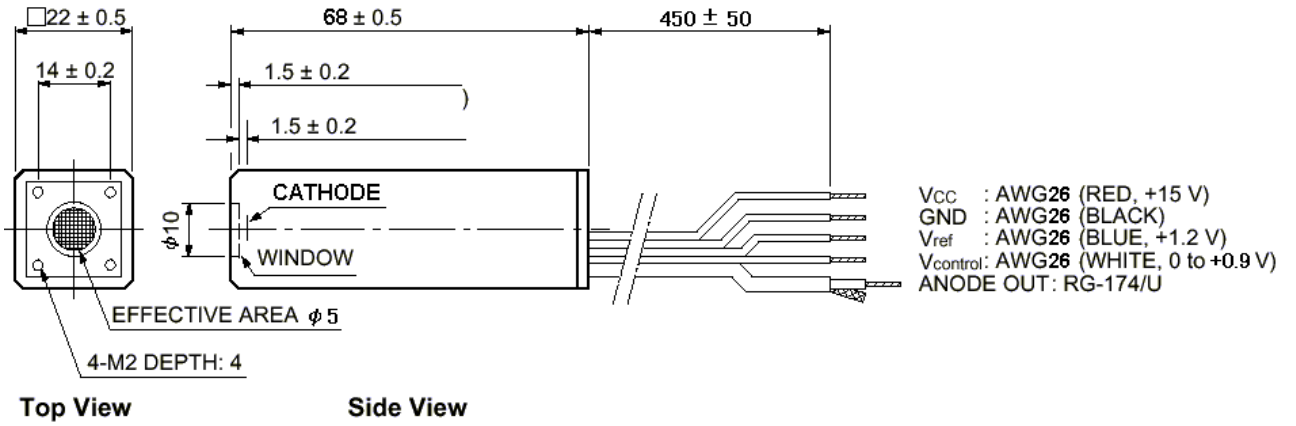
(B) After 30 min storage in darkness.

(C) Control Voltage : Plateau ; Temperature control at 25 Cel.

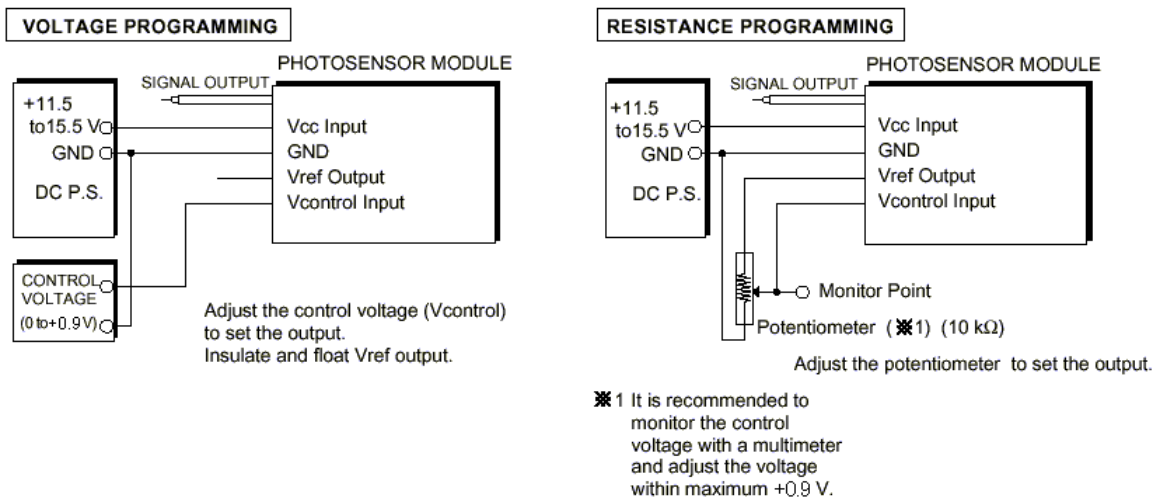
(D) Measured across 1 MOhm / 22 pF load

## Dimensions

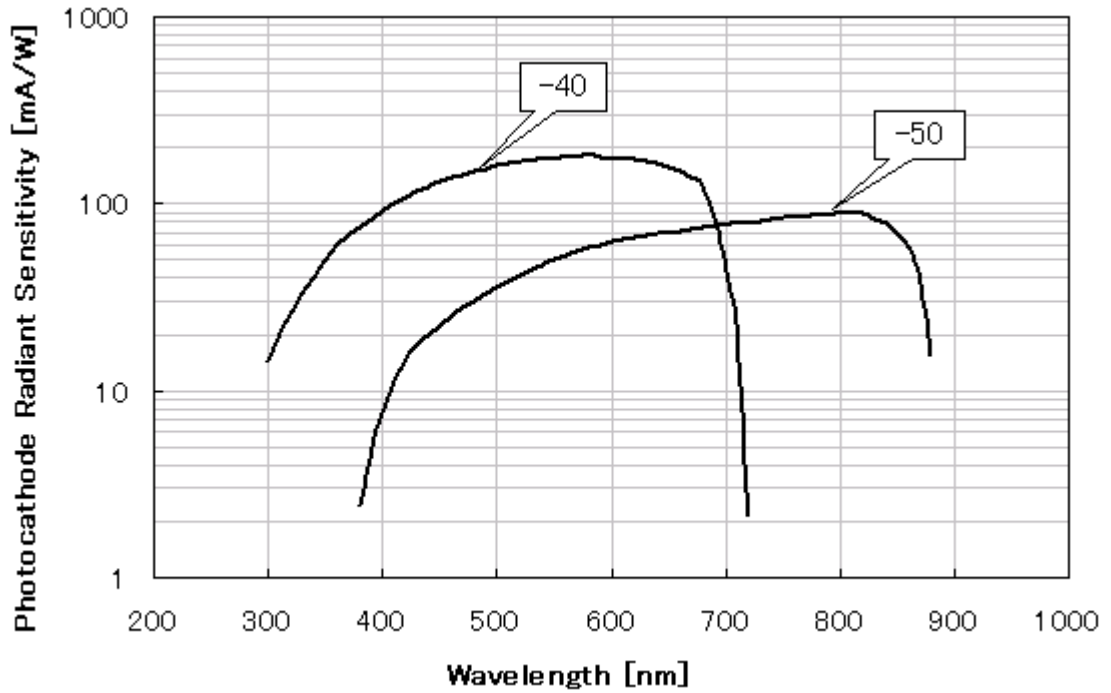
Unit : mm



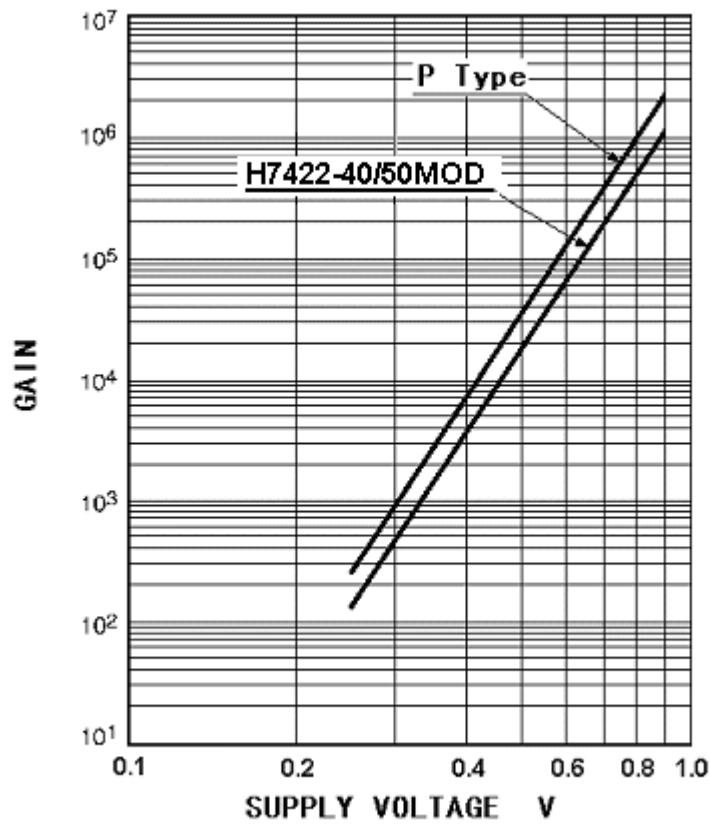
## Wiring Examples For Sensitivity Adjustment



## Typical Spectral Photocathode Radiant Sensitivity (H7422/H7422P MOD)



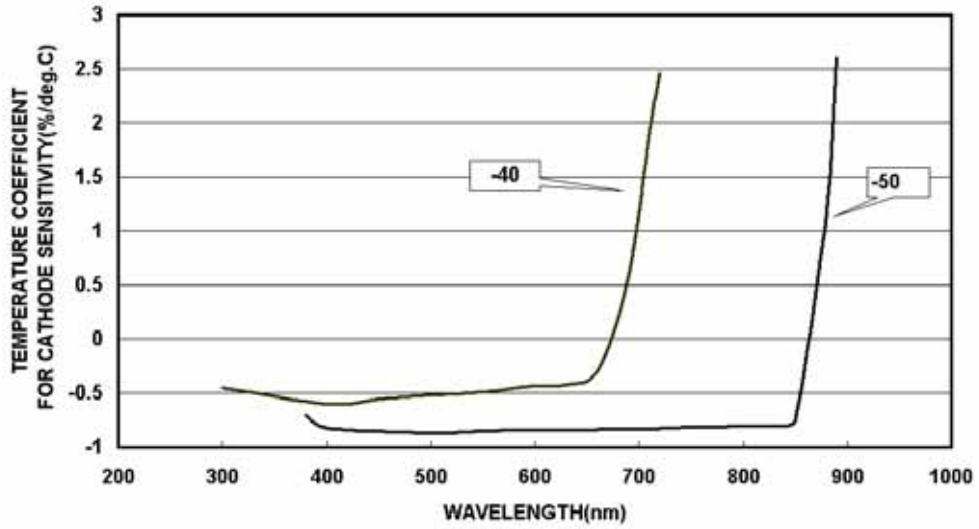
## Typical Gain Characteristics (H7422/H7422P MOD)



V<sub>cont</sub> 0.9V Maximum

Temperature control at 10 Cel

## Temperature Coefficient



For further information, contact our sales office in your country.

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*Characteristics and specifications are subject to change without prior notice.*

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