

# H10770B-40/-50 Specifications

## W/O PROTECTION CIRCUIT

### Maximum Ratings

Parameter	-40/-50	Unit
Main unit input voltage	+18	V dc
Operating temperature	+5 to +35	Cel
Storage temperature	-20 to +50	Cel
Output Current	2	μA
Control Voltage (Vcontrol)	+0.9(Input impedance for Vcont. is 100 kΩ)	V

### Specifications General

(Ta = 25 Cel)

Parameter	-40	-50	Unit
Spectral response	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

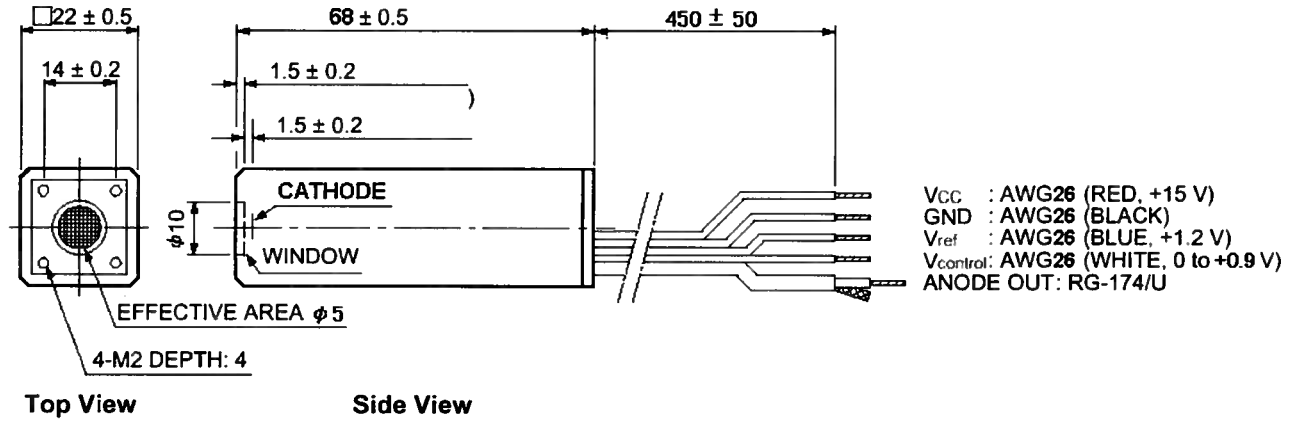
(Ta = 25 Cel)

Parameter		-40	-50	Unit
H10770	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	3.3	4.1	nA
	Maximum	9.3	11.6	
H10770P	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	1/s
	Maximum	18000	22500	
Induced Ripple in Signal <sup>(D)</sup>		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

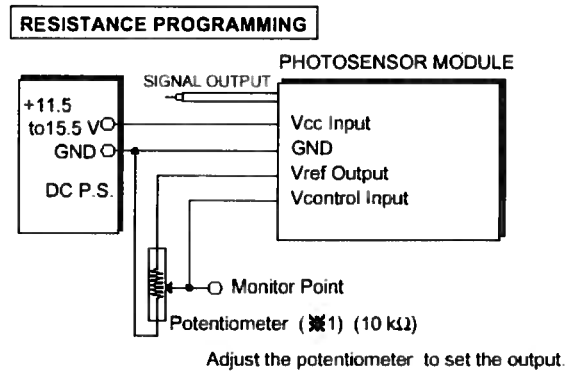
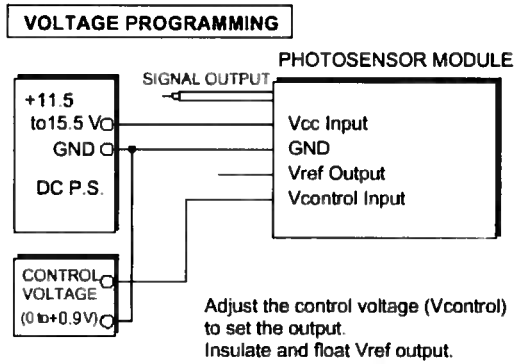
- (A) Control Voltage : +0.8 V ; Temperature control at 25 Cel.
- (B) After 30 min storage in darkness.
- (C) Control Voltage : Plateau ; Temperature control at 25 Cel.
- (D) Measured across 1 MΩ / 22 pF load

## □ Dimensions

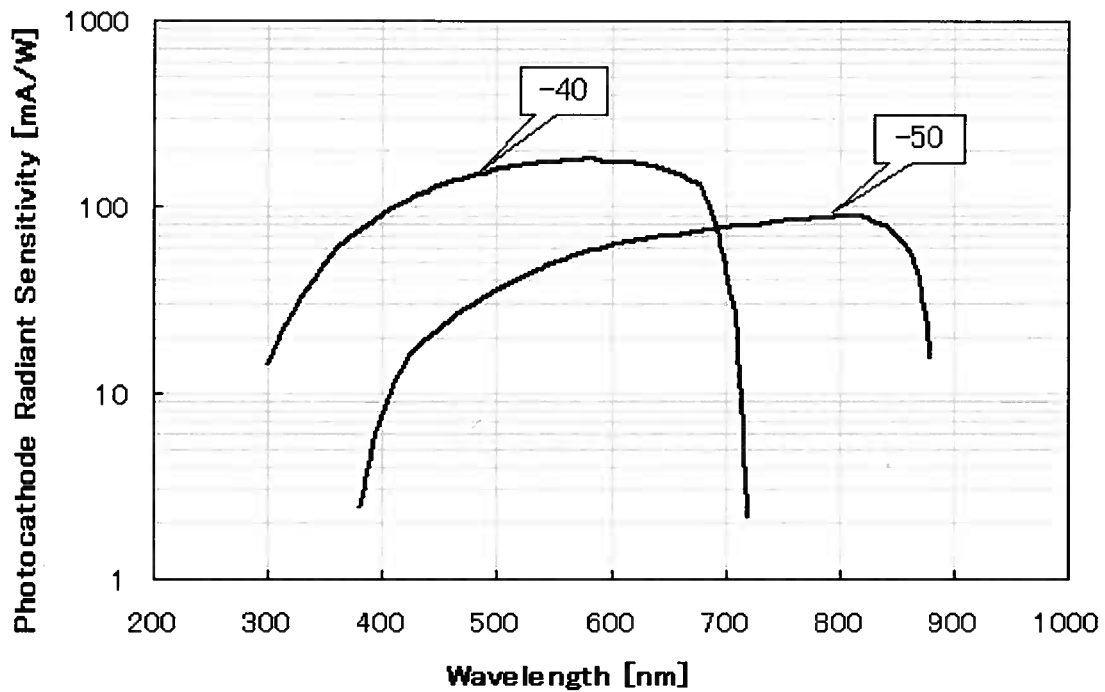
Unit : mm



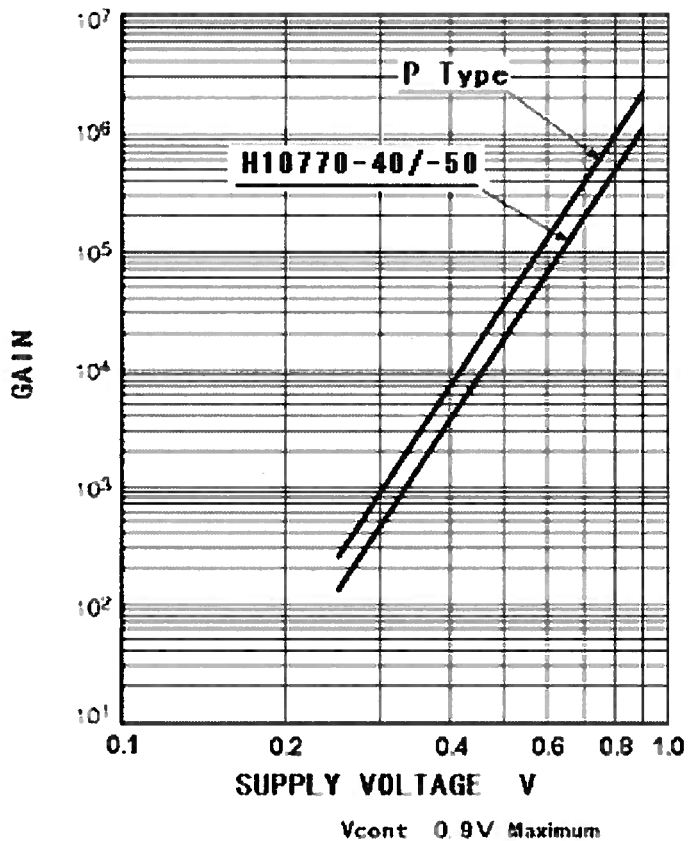
## □ Wiring Examples For Sensitivity Adjustment



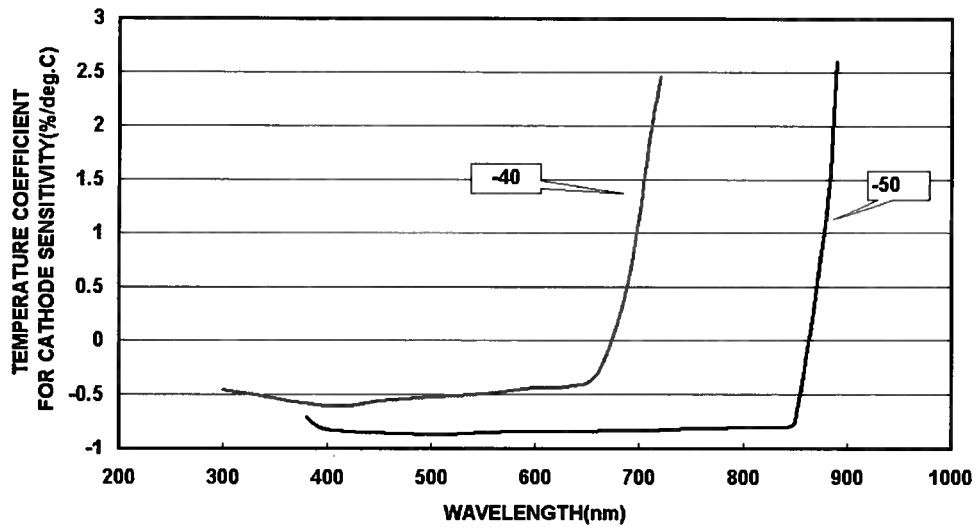
※1 It is recommended to monitor the control voltage with a multimeter and adjust the voltage within maximum +0.9 V.



□ Typical Gain Characteristics  
(H10770(P)-40/-50)



Temperature control at 10 Cel



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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