

PRELIMINARY

H10770(P)B-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)*1	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	7.5	Typical × 10 ⁻⁶ A/nW
		at 550 nm	88	25	
		at 800 nm	-	45	
	Dark Current ^{(A) (B)}	Typical	3.3	4.1	nA
		Maximum	9.3	11.6	
H10770P	Radiant Sensitivity	at 420 nm	108	15	Typical × 10 ⁻⁶ A/nW
		at 550 nm	176	50	
		at 800 nm	-	90	
	Dark Count ^{(B) (C)}	Typical	6000	7500	1/s
		Maximum	18000	22500	
Induced Ripple in Signal ^(D)			0.6		Maximum mV p-p
Anode Pulse Rise Time ^(A)			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.

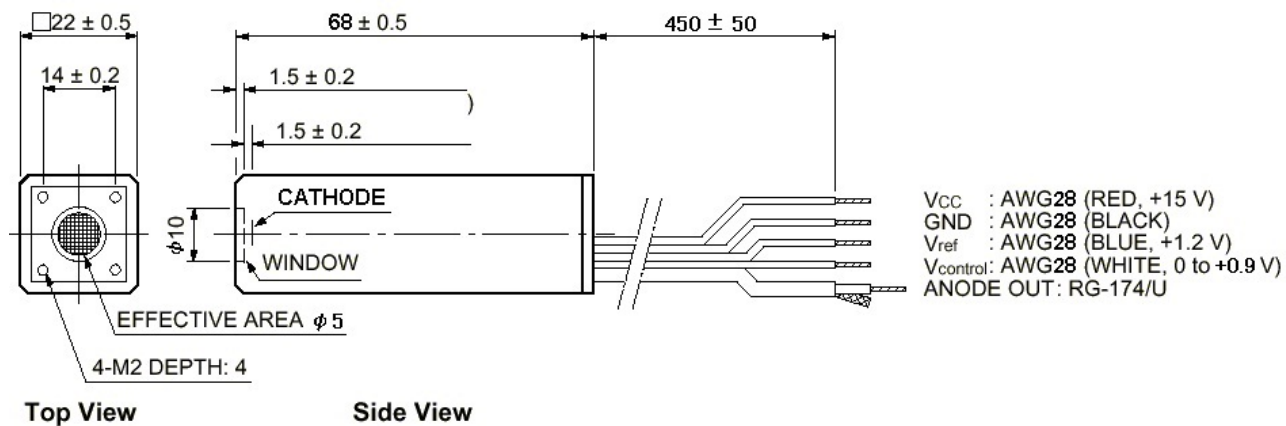
(B) After 30 min storage in darkness.

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

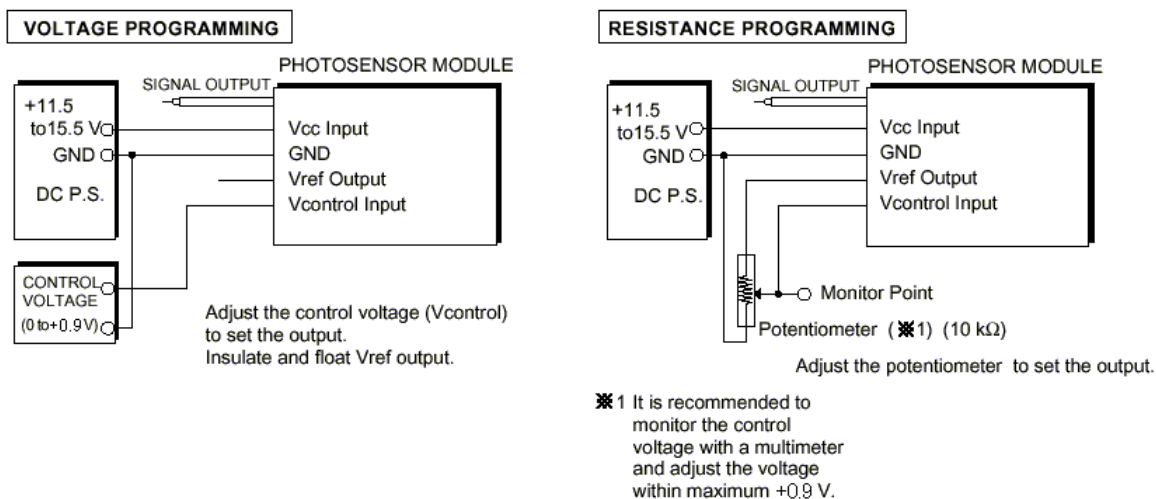
(D) Measured across 1 MOhm / 22 pF load

□ Dimensions

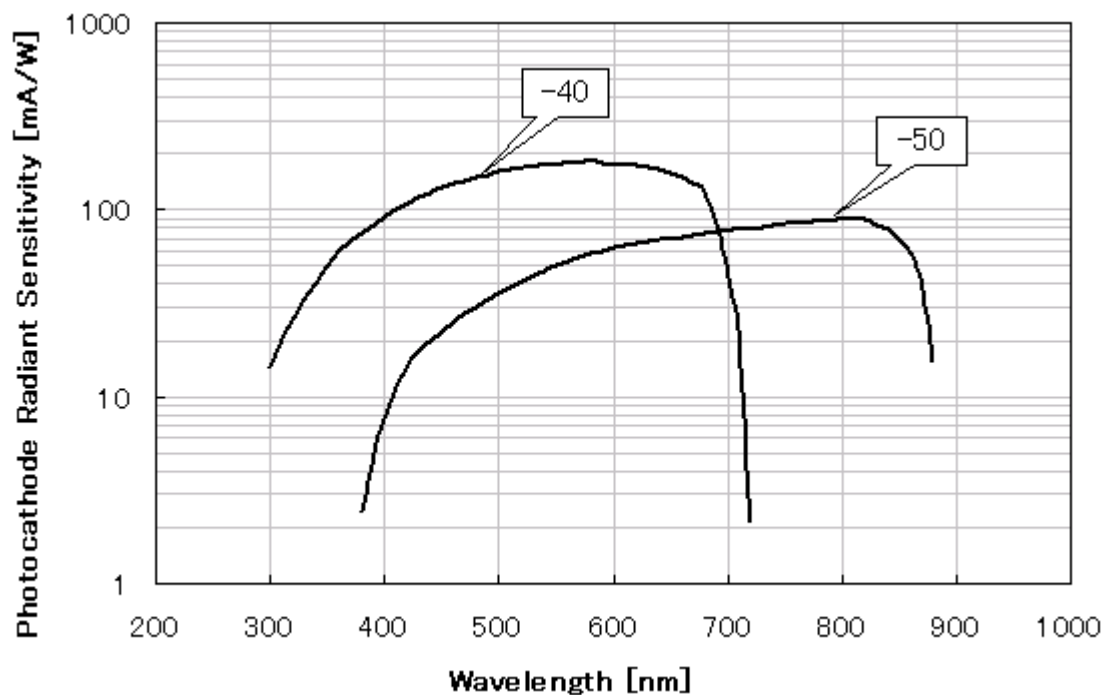
Unit : mm



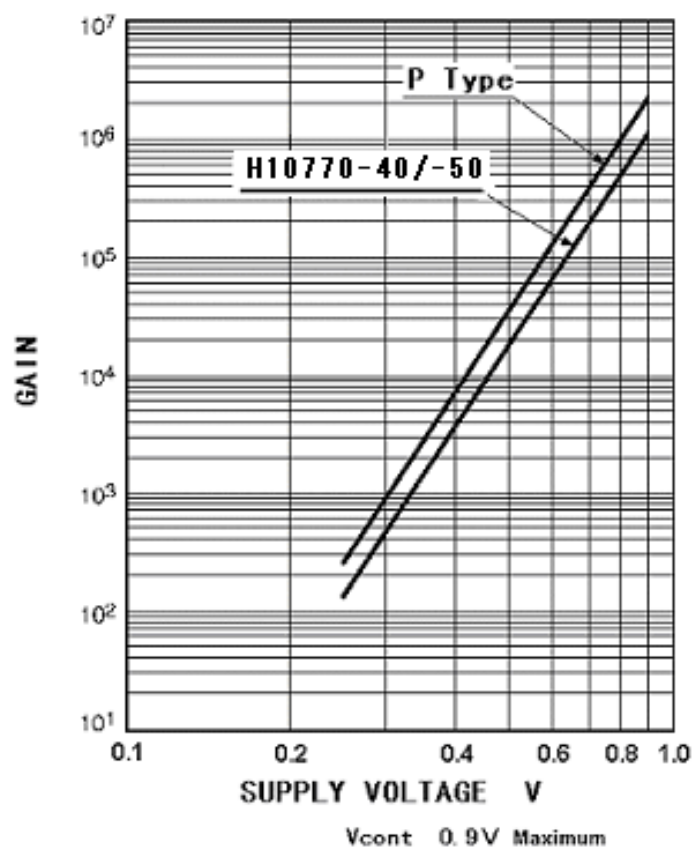
□ Wiring Examples For Sensitivity Adjustment



□ Typical Spectral Photocathode Radiant Sensitivity (H10770(P)-40/-50)

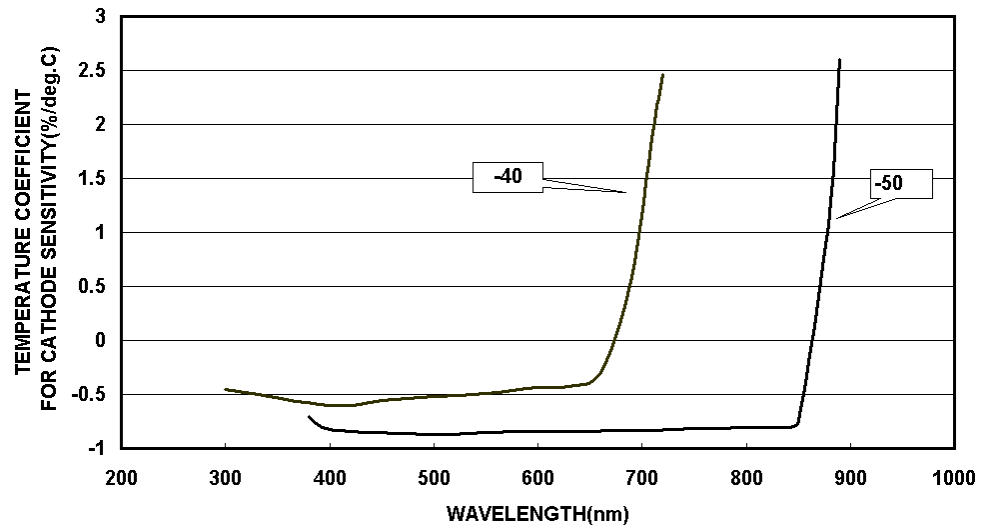


□ Typical Gain Characteristics (H10770(P)-40/-50)



Temperature control at 10 Cel

□ Temperature Coefficient



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

HAMAMATSU PHOTONICS K.K.,

Homepage URL <http://www.hamamatsu.com>

Electron Tube Center

314-5, Shimokanzo, Iwata-city, Shizuoka-ken, 438-0193, Japan

Telephone: (81)539-62-5248, Fax: (81)539-62-2205

Characteristics and specifications are subject to change without prior notice.

©2006 Hamamatsu Photonics K.K.

HAMAMATSU