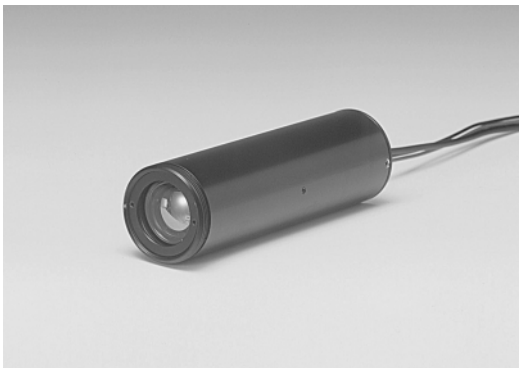
Head-on PMT

Photon Counting Head H7360 Series



The H7360 series is a wide sensitive area photon counting head device containing a 25-mm (1") head-on photomultiplier tube, high-voltage power supply circuit and photon counting circuit. Since those circuits are designed for wide band, the H7360 series can operate at a high count rate. The high voltage supply for photomultiplier tube and the discriminator level are preset to optimum values so that photon counting can be performed just by connecting a +5 V supply and a pulse counter.

The H7360-01 is of low noise, the H7360-02 has enhanced detection efficiency in the visible range, and the H7360-03 covers sensitivity from the visible to near infrared.

A mount flange (E6264) is provided as an option for easy installation to measurement equipment.

Product Variations

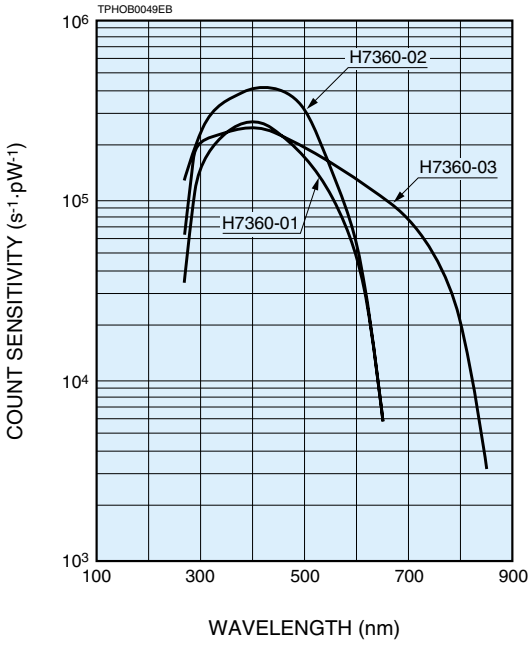
Type No.	Spectral Response	Features
H7360-01	300 nm to 650 nm	Low noise
H7360-02		High detection efficiency
H7360-03	300 nm to 850 nm	For visible to near IR range

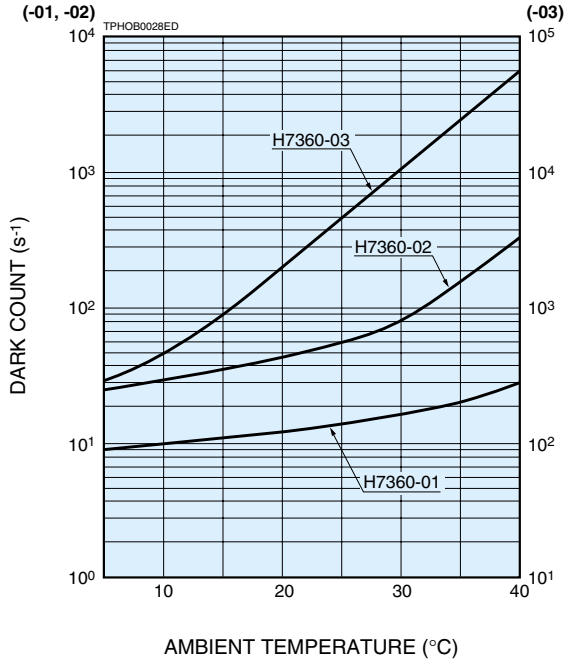
Specifications

Parameter			H7360 Series			Unit
Suffix			-01	-02	-03	
Input Voltage			+4.75 to +5.25			V
Max. Input Voltage			+6			V
Max. Input Current			140			mA
Effective Area			ϕ22			mm
Peak Sensitivity Wavelength			375	420	420	nm
Count Sensitivity	Typ.	300 nm	1.4×10^5	2.3×10^5	2.1×10^5	$s^{-1} \cdot pW^{-1}$
		400 nm	2.7×10^5	4.1×10^5	2.5×10^5	
		500 nm	1.7×10^5	3.4×10^5	2.0×10^5	
		600 nm	4.6×10^4	5.7×10^4	1.3×10^5	
		700 nm	—	—	7.8×10^4	
Count Linearity *1			6.0×10^6			s^{-1}
Dark Count *2		Typ.	15	60	5000	s^{-1}
		Max.	80	300	15000	
Pulse-pair Resolution			18			ns
Output Pulse Width			9			ns
Output Pulse Height *3		Typ.	3			V
Recommended Load Resistance			50			Ω
Signal Output Logic			Positive logic			—
Operating Ambient Temperature			+5 to +40			°C
Storage Temperature			-20 to +50			°C
Weight		Main Body	140			g
		Mount Flange	25			

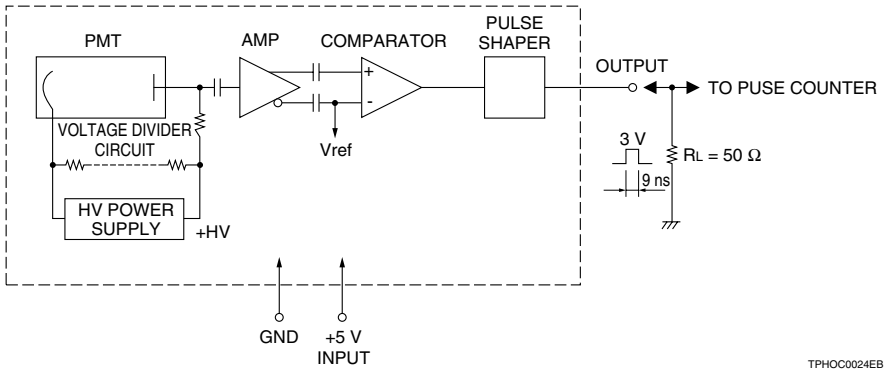
*1: Random pulse, at 10 % count loss
*2: After 30 minute storage in darkness
*3: With input voltage +5 V, Load resistance 50 Ω and Coaxial cable RG-174/U (450 mm)

Characteristics (Count sensitivity, Dark count)

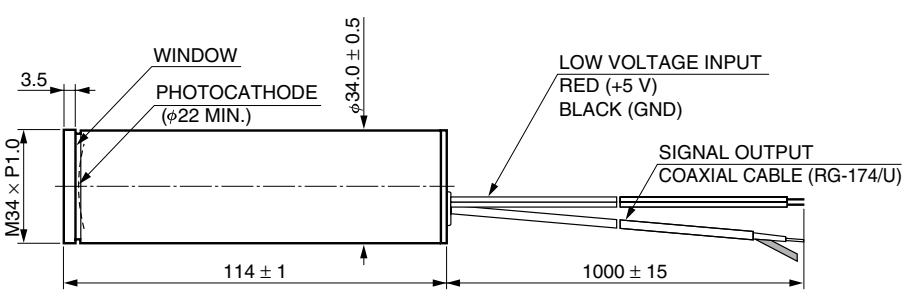




Block Diagram



Dimensional Outlines (Unit: mm)



Mount Flange E6264 (Option)

