

H7155 series are compact photon counting heads comprising a metal package PMT, high-speed photon counting circuit and high voltage power supply. The operation only requires connecting a +5Vdc power supply and a pulse counter; no need for discrimination level or high voltage adjustment by users.

H7155 series accept direct light input or an optical fiber adaptor E5776 (FC Type).

FEATURES

- Compact and light weight
- No adjustment required
- Low power consumption
- Requires only +5Vdc source

APPLICATIONS

- Chemiluminescence & Bioluminescence detection
- Fluorescence detection
- Other low level light detections

SPECIFICATIONS

MAXIMUM RATINGS

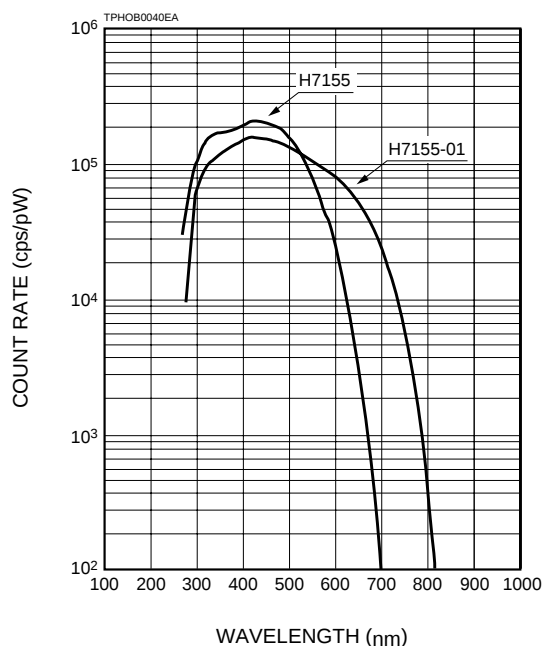
Parameter	Value	Unit
Supply Voltage	+6	V
Operating Temperature	+5 to +40	°C
Storage Temperature	-20 to +50	°C

GENERAL SPECIFICATIONS

Parameter	H7155	H7155-01	Unit
Photosensitive Area	8		mm
Sensitive Wavelength Range	300 to 650	300 to 820	nm
Dark count (at +25°C)	100	600	cps Typ.
Counting Linearity ^①	1.5		Mcps
Pulse Pair Resolution	70		ns
Output Pulse Width	30		ns
Output Impedance	50		Ω
Output Logic	TTL, Positive Logic		—
Input Voltage	+4.5 to +5.5		V
Input Current at 1.5Mcps output	50		mA Max.
Weight	75		g

NOTE : ① at -10% deviation from linear output.(random pulse)

Figure 1: Spectral Counting Characteristics



PHOTON COUNTING HEAD H7155 SERIES

Figure 2: Internal Diagram

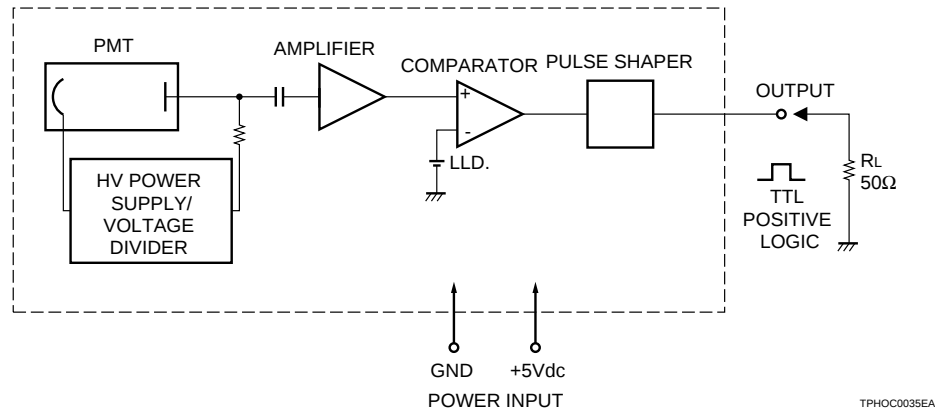
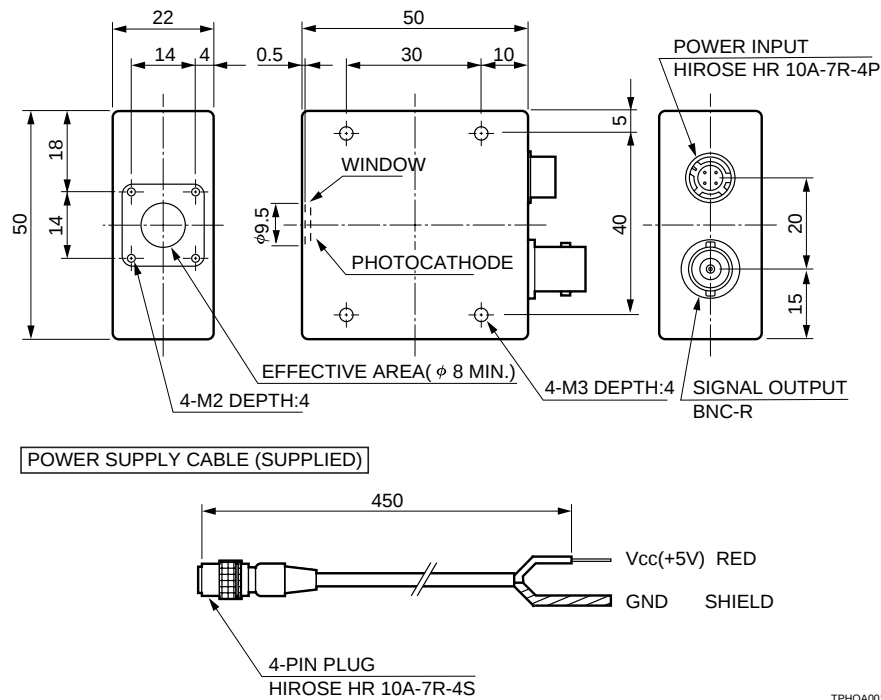


Figure 3: Dimensional Outline (Unit: mm)



NOTE : When connecting this photon counting head H7155 series with a commercial available counter of TTL input, use a 50 Ω termination resistor or a 50 Ω feed-through termination (ex. TEKTRONIX011-0049-01 etc.)

* PATENT : USA 1 (PAT. No. 5410211) PATENT PENDING : JAPAN 13, USA 9, EUROPE 10

HAMAMATSU

HAMAMATSU PHOTONICS K.K., Electron Tube Center

314-5, Shimokanzo, Toyooka-village, Iwata-gun, Shizuoka-ken, 438-0193, Japan, Telephone: (81)539/62-5248, Fax: (81)539/62-2205

U.S.A.: Hamamatsu Corporation: 360 Foothill Road, P. O. Box 6910 Bridgewater, N.J. 08807-0910, U.S.A., Telephone: (1)908-231-0960, Fax: (1)908-231-1218

Germany: Hamamatsu Photonics Deutschland GmbH: Arzbergerstr. 10, D-82211 Herrsching am Ammersee, Germany, Telephone: (49)8152-375-0, Fax: (49)8152-2658

France: Hamamatsu Photonics France S.A.R.L.: 8, Rue du Saule Trapu, Parc du Moulin de Massy, 91882 Massy Cedex, France, Telephone: (33)1 69 53 71 00, Fax: (33)1 69 53 71 10

United Kingdom: Hamamatsu Photonics UK Limited: Lough Point, 2 Gladbeck Way, Windmill Hill, Enfield, Middlesex EN2 7JA, United Kingdom, Telephone: (44)181-367-3560, Fax: (44)181-367-6384

North Europe: Hamamatsu Photonics Norden AB: Färögatan 7, S-164-40 Kista Sweden, Telephone: (46)8-703-29-50, Fax: (46)8-750-58-95

Italy: Hamamatsu Photonics Italia: S.R.L.: Strada della Moia, 1/E, 20020 Arese, (Milano), Italy, Telephone: (39)02-935 81 733, Fax: (39)02-935 81 741

TPHO1012E02
JAN. 1999 SI
Printed in Japan (1000)