

FEATURES

- High speed response: Up to 800 MHz
- Compact and lightweight
- Metal package (TO-8 type)

APPLICATIONS

- Optical communication
- Mass spectrometry



SPECIFICATIONS

GENERAL & CHARACTERISTICS (at 25 °C)

Parameter			Value	Unit
Spectral response			300 to 650	nm
Peak sensitivity wavelength			400	nm
Window material			Borosilicate glass	—
Photocathode material			SBA	—
Effective area			ϕ8	mm
Number of dynode stages			6	—
Cathode	Luminous sensitivity	Min.	80	μA/lm
		Typ.	105	
	Blue sensitivity index	Typ.	13.5	—
	Radiant sensitivity ①	Typ.	110	mA/W
Anode	Luminous sensitivity	Min.	0.4	A/lm
		Typ.	2.6	
	Dark current (After 30 min)	Typ.	0.1	nA
		Max.	1.0	
Gain			2.5 × 10 ⁴	—
Rise time			400	ps
Operating ambient temperature ②			-30 to +50	°C
Storage temperature ②			-30 to +50	°C

NOTE: ①Measured at the peak sensitivity wavelength

②No condensation

MAXIMUM RATINGS (Absolute maximum values)

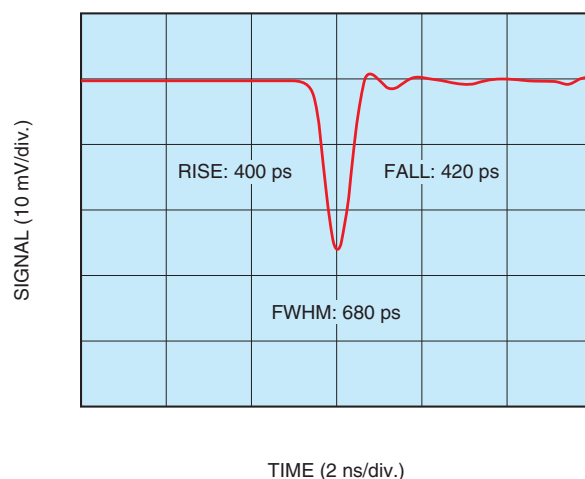
Parameter		Value	Unit
Supply voltage	Between anode and cathode	1000	V
	Between anode and last dynode	143	V
Average anode current		0.1	mA

VOLTAGE DISTRIBUTION RATIO AND SUPPLY VOLTAGE

Electrodes	K	Dy1	Dy2	Dy3	Dy4	Dy5	Dy6	P
Distribution ratio	1	1	1	1	1	1	1	1

Supply voltage: 800 V, K: Cathode, Dy: Dynode, P: Anode

Figure 1: Time response



METAL PACKAGE PHOTOMULTIPLIER TUBE R14755U-100

Figure 2: Spectral response (Typ.)

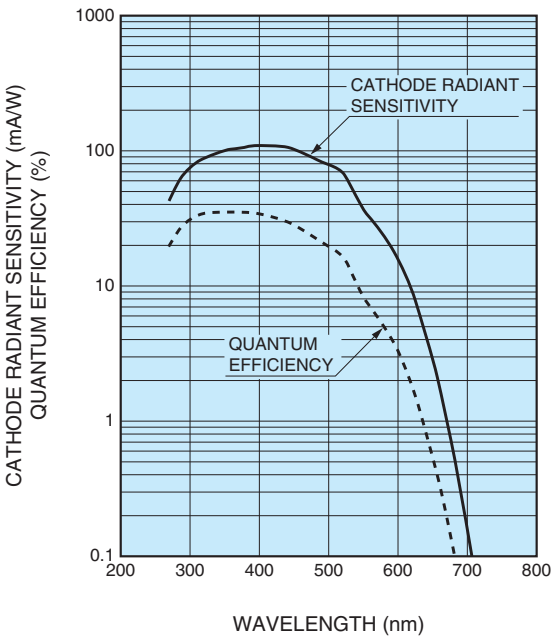


Figure 3: Gain

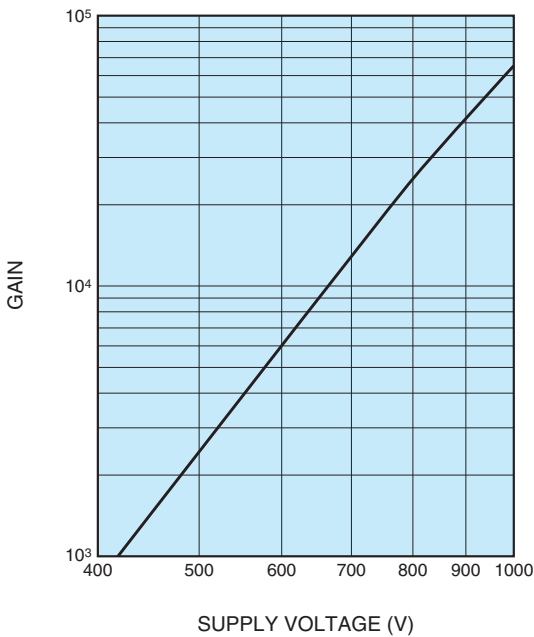
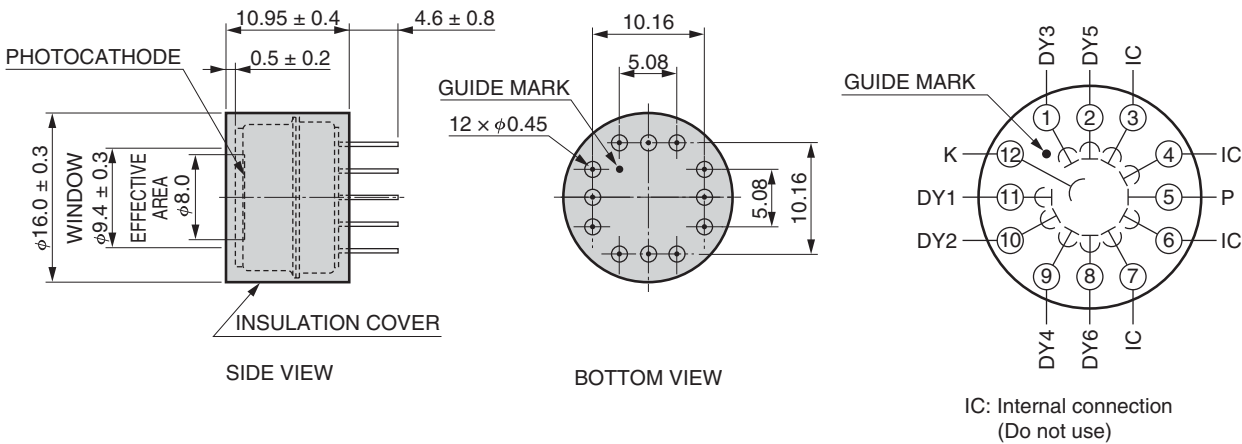


Figure 4: Dimensional outline and basing diagram (Unit: mm)



HAMAMATSU PHOTONICS K.K. www.hamamatsu.com

Electron Tube Division

314-5, Shimokanzo, Iwata City, Shizuoka Pref., 438-0193, Japan, Telephone: (81)539/62-5248, Fax: (81)539/62-2205

U.S.A.: Hamamatsu Corporation: 360 Foothill Road, Bridgewater, NJ 08807, U.S.A., Telephone: (1)908-231-0960, Fax: (1)908-231-1218 E-mail: usa@hamamatsu.com

Germany: Hamamatsu Photonics Deutschland GmbH: Arzbergerstr. 10, D-82211 Herrsching am Ammersee, Germany, Telephone: (49)8152-265-0, Fax: (49)8152-265-8 E-mail: info@hamamatsu.de

France: Hamamatsu Photonics France S.A.R.L.: 19, 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 E-mail: infos@hamamatsu.fr

United Kingdom: Hamamatsu Photonics UK Limited: 2 Howard Court, 10 Tewin Road, Welwyn Garden City, Hertfordshire AL7 1BW, UK, Telephone: (44)1707-294888, Fax: (44)1707-325777 E-mail: info@hamamatsu.co.uk

North Europe: Hamamatsu Photonics Norden AB: Torshamnsgatan 35 16440 Kista, Sweden, Telephone: (46)8-509 031 00, Fax: (46)8-509 031 01 E-mail: info@hamamatsu.se

Italy: Hamamatsu Photonics Italia S.r.l.: Strada della Moia, 1 int. 6, 20020 Arese (Milano), Italy, Telephone: (39)02-93 58 17 33, Fax: (39)02-93 58 17 41 E-mail: info@hamamatsu.it

China: Hamamatsu Photonics (China) Co., Ltd.: 1201 Tower B, Jiaming Center, 27 Dongsanhuan Beilu, Chaoyang District, 100020 Beijing, P.R.China, Telephone: (86)10-6586-6006, Fax: (86)10-6586-2866 E-mail: hpc@hamamatsu.com.cn

Taiwan: Hamamatsu Photonics Taiwan Co., Ltd.: 8F-3, No.158, Section2, Gongdao 5th Road, East District, Hsinchu, 300, Taiwan R.O.C. Telephone: (886)3-659-0080, Fax: (886)3-659-0081 E-mail: info@hamamatsu.com.tw

TPMH1380E01

FEB. 2020 IP