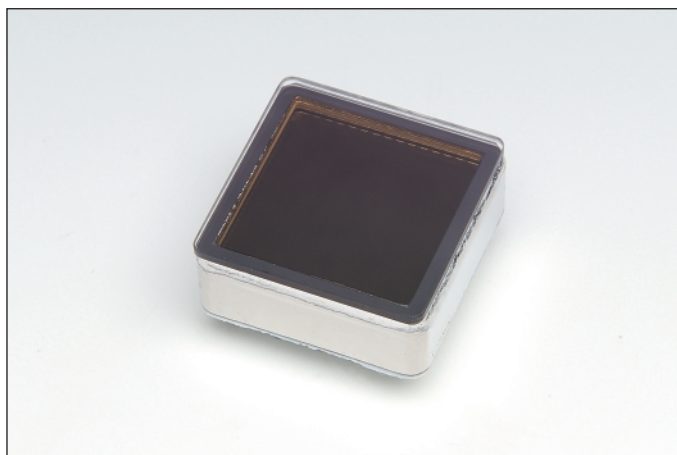


FEATURES

- 27.6 mm square shape
- 16 matrix multianode
- Small dead space
- Fast time response
- For high magnetic field

APPLICATIONS

- High energy physics
- Multichannel time resolved fluorescence detection measurement
- Light detection and ranging



SPECIFICATIONS

GENERAL

Parameter		Ratings	Unit
Spectral response		160 to 850	nm
Wavelength of maximum response		350 to 400	nm
Input window	Material	Synthetic silica	—
	Thickness	1.5	mm
Photocathode	Material	Multialkali	—
	Minimum effective area	23 × 23	mm
Microchannel plate (MCP)	Construction	2 stages	—
	Channel diameter	10	μm
Number of anode pixels		16 (4 × 4 matrix)	—
Anode pixel size		5.28 × 5.28	mm

RATINGS

Parameter		Maximum ratings	Unit
Supply voltage	Photocathode – Anodes	2000 to 3600 ^(A)	V
Operating ambient temperature ^(B)		-30 to +45	°C
Storage temperature ^(B)		-30 to +50	°C

CHARACTERISTICS

Parameter		Min.	Typ.	Max.	Unit
Photocathode	Luminous sensitivity	—	170	—	μA/lm
	Quantum efficiency at peak response	17	24	—	%
MCP gain (at maximum supply voltage ^(C))		4 × 10 ⁵	1 × 10 ⁶	—	—
Dark current at maximum supply voltage (25 °C, all anodes)		—	3 × 10 ⁻⁸	1 × 10 ⁻⁶	A
Dark counts at maximum supply voltage (25 °C, all anodes)		—	5000	—	s ⁻¹
Time response	Rise time	—	180	—	ps
	I.R.F. (FWHM)	—	70	—	ps

^(A) The maximum supply voltage will be determined between 2000 V to 3600 V in order to satisfy the specification of MCP gain.

^(B) No condensation

^(C) The ratio of dividing resistors is 0.5: 2.5: 2.5: 2.5: 1.5

MICROCHANNEL PLATE PHOTOMULTIPLIER TUBE R10754-07-M16

Figure 1: I.R.F. (Instrument response function)

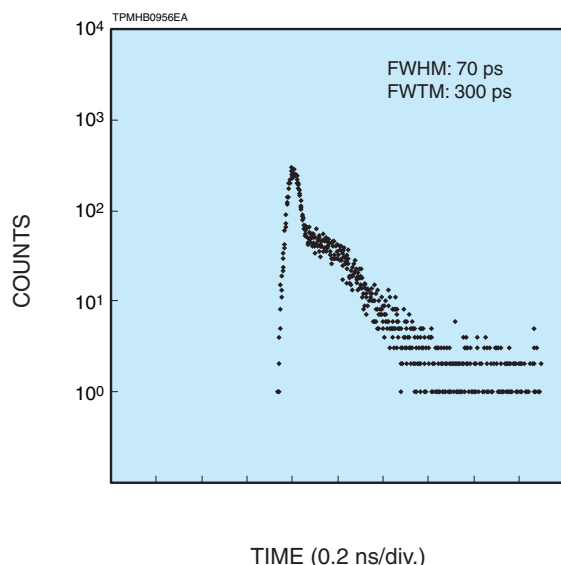


Figure 2: Output waveform

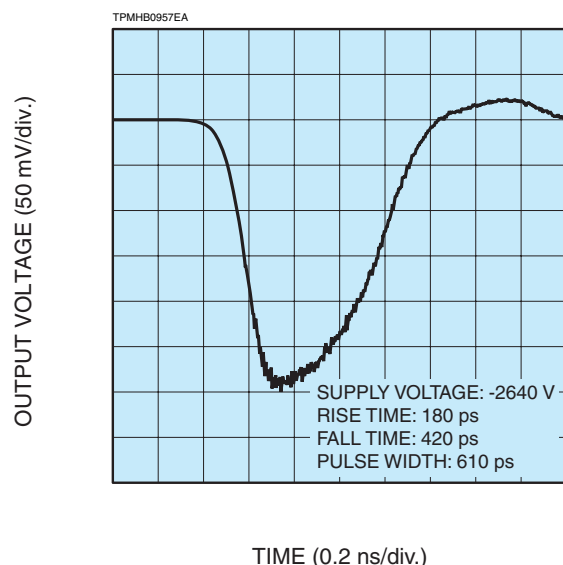
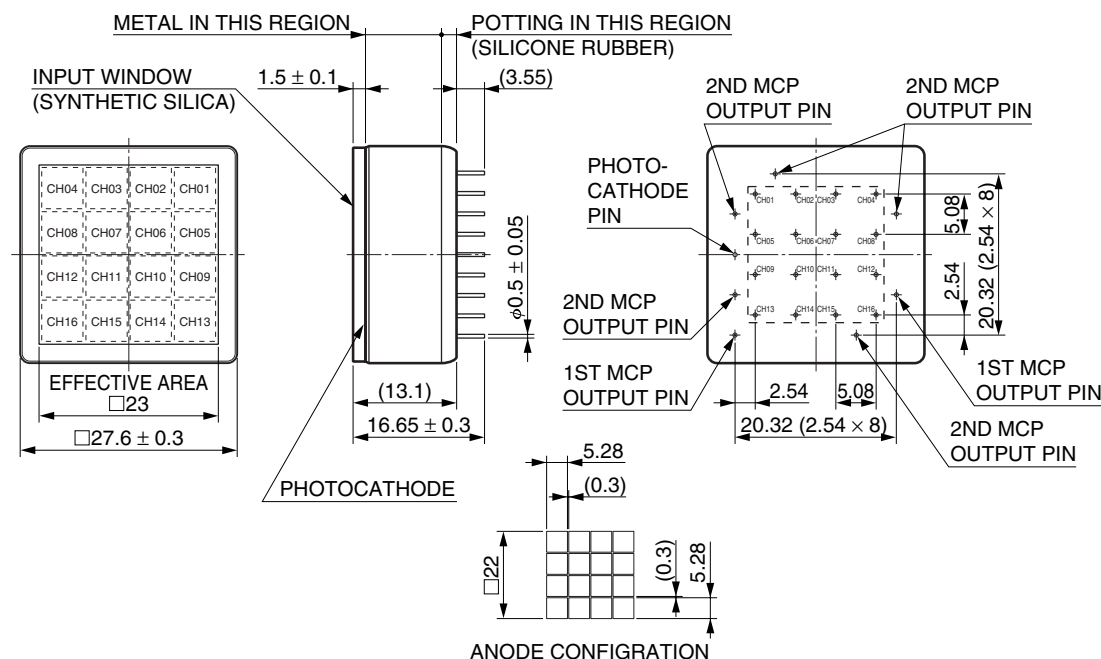


Figure 3: Dimensional outlines (Unit: mm)



TPMHA0624EA

HAMAMATSU PHOTONICS K.K. www.hamamatsu.com

HAMAMATSU PHOTONICS K.K., 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, N.J. 08807-0910, 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)8152-375-0, Fax: (49)8152-2658 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, United Kingdom, Telephone: (44)1707-294888, Fax: (44)1707-294889
North Europe: Hamamatsu Photonics Norden AB: Torshamnsgatan 35 SE-164 40 Kista, Sweden, Telephone: (46)8-508-031-00, Fax: (46)8-508-031-01 E-mail: info@hamamatsu.se

Italy: Hamamatsu Photonics Italia S.r.l.: Strada della Moia, 1 int. 6, 20020 Arese (Milano), Italy. Telephone: (39)02-93581733. Fax: (39)02-93581741 E-mail: info@hamamatsu.it

China: Hamamatsu Photonics (China) Co., Ltd.: B1201 Jiaming Center, No.27 Dongsanhuan Beilu, Chaoyang District, Beijing 100020, China, Telephone: (86)10-6586-6006, Fax: (86)10-6586-2866 E-r

Taiwan: Hamamatsu Photonics Taiwan Co., Ltd.: 8F-3, No.158, Section2, Gongdao 5th Road, East District, Hsinchu, 300, Taiwan R.O.C. Telephone: (886)03-659-0080, Fax: (886)07-811-7238 E-mail: info@tw.hpk.co.jp

TPMH1364E01
JUN. 2016 IP