

**For VUV Detection, 19 mm (3/4 Inch) Diameter, 10-stage,
Head-On Type, Solar Blind Response (115 nm to 200nm)**

GENERAL

Parameter		Description/Value	Unit
Spectral Response		115 to 200	nm
Wavelength of Maximum Response		140	nm
Photocathode	Material	Cs-I	—
	Minimum Useful Size	14	mm dia.
Window Material		MgF ₂	—
Dynode	Structure	Linear focused	—
	Number of Stages	10	—
Base		12 pin base JEDEC No. B12-43	—
Suitable Socket		E678-12A	—

MAXIMUM RATINGS (Absolute Maximum Values)

Parameter		Value	Unit
Supply Voltage	Between Anode and Cathode	2250	V dc
	Between Anode and Last Dynode	250	V dc
Average Anode Current		0.01	mA
Ambient Temperature		-80 to +50	°C

CHARACTERISTICS (at 25 °C)

Parameter		Min.	Typ.	Max.	Unit
Cathode Sensitivity	Radiant at 122 nm	—	12	—	mA/W
	Quantum Efficiency at 130 nm	—	1.3	—	%
Anode Sensitivity	Radiant at 122 nm	2.0×10^2	1.2×10^3	—	A/W
Gain		—	1.0×10^5	—	—
Anode Dark Current (after 30 min. storage in darkness)		—	0.03	0.05	nA
Time Response	Anode Pulse Rise Time	—	1.6	—	ns
	Electron Transit Time	—	17	—	ns

VOLTAGE DISTRIBUTION RATIO AND SUPPLY VOLTAGE

Electrodes	K	Dy1	Dy2	Dy3	Dy4	Dy5	Dy6	Dy7	Dy8	Dy9	Dy10	P
Ratio	1.5	1	1	1	1	1	1	1	1	1	1	1

Supply Voltage: 2000 V dc, K: Cathode, Dy: Dynode, P: Anode

PHOTOMULTIPLIER TUBE R972

Figure 1: Typical Spectral Response

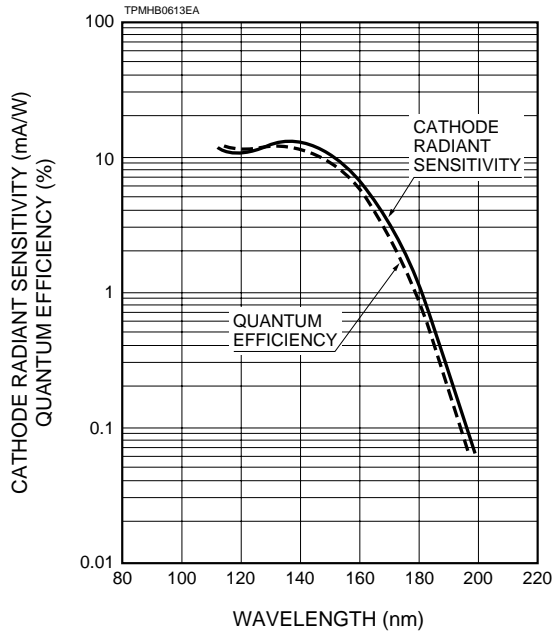


Figure 2: Typical Gain Characteristics

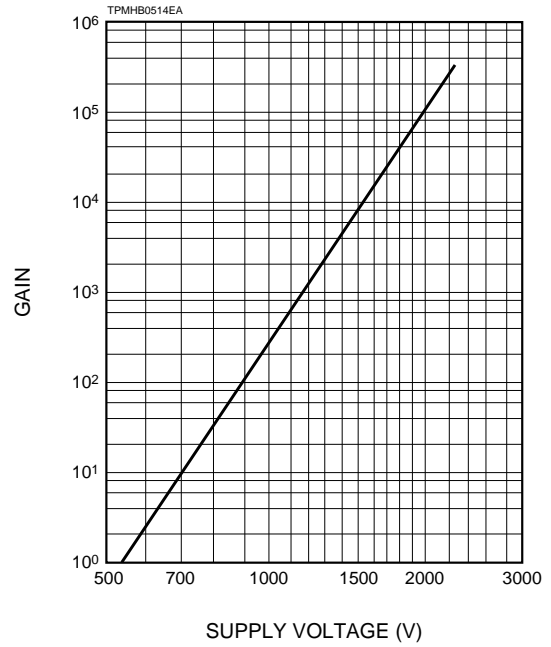
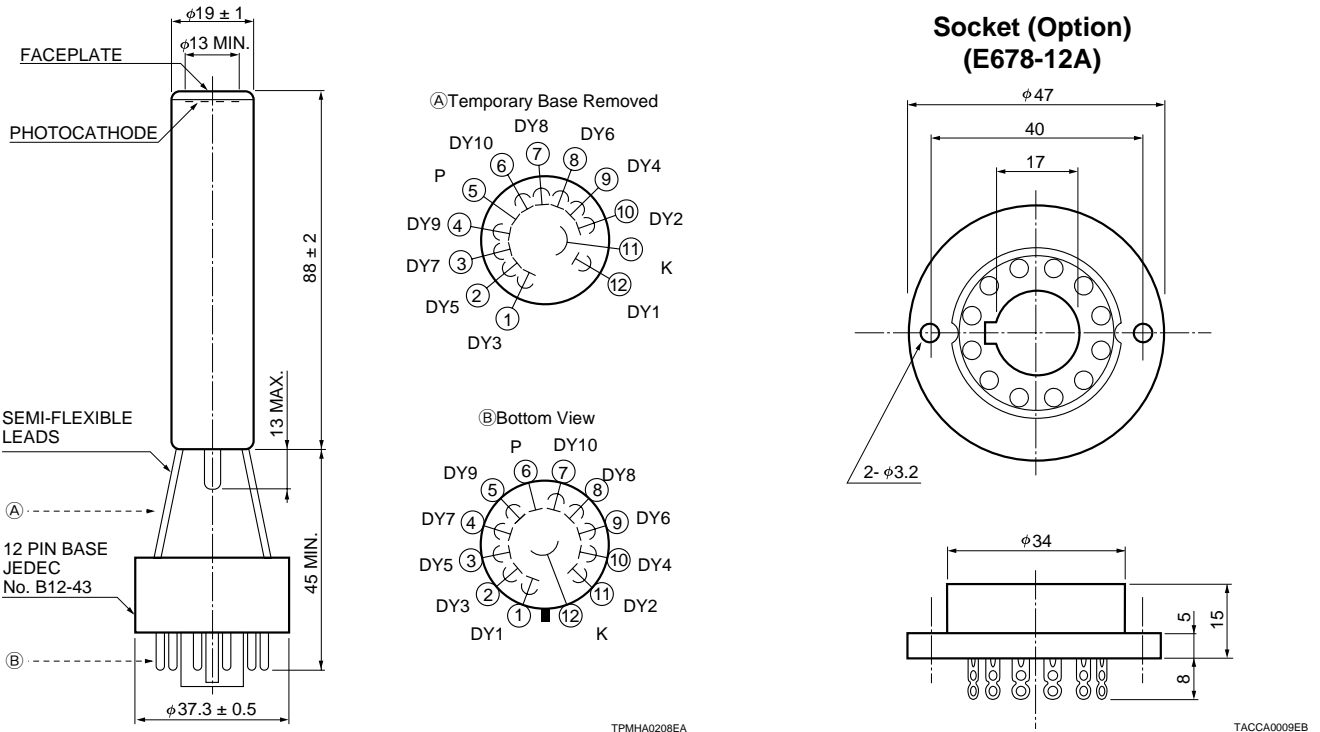


Figure 3: Dimensional Outline and Basing Diagram (Unit: mm)



HAMAMATSU

HOME PAGE URL <http://www.hamamatsu.com>

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 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.: 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 E-mail: infos@hamamatsu.fr

United Kingdom: Hamamatsu Photonics UK Limited, 2 Howard Court, 10 Twin Road Welwyn Garden City Hertfordshire AL7 1BW, United Kingdom, Telephone: 44-(0)1707-294888, Fax: 44-(0)1707-325777 E-mail: info@hamamatsu.co.uk

North Europe: Hamamatsu Photonics Norden AB, Smidesvägen 12, SE-171-41 SOLNA, 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/E, 20020 Arese, (Milano), Italy, Telephone: (39)02-935 81 733, Fax: (39)02-935 81 741 E-mail: info@hamamatsu.it

TPMH1211E02
NOV. 2000 IP