

Ruggedized, 38mm(1-1/2 Inch) Diameter, Bialkali Photocathode 10-Stage, Circular-Cage Dynode, Head-On Type

GENERAL

Parameter		Description/Value	Unit
Spectral Response		300 to 650	nm
Wavelength of Maximum Response		420 ± 50	nm
Photocathode	Material	Bialkali	-
	Minimum Effective Area	34	mm dia.
Window Material		Borosilicate glass	-
Dynode	Structure	Circular-cage	-
	Number of Stages	10	-
Direct Interelectrode Capacitances	Anode to Last Dynode	3	pF
	Anode to All Other Electrodes	4	pF
Base		12-pin base JEDEC No.B12-43	-
Suitable Socket		E678-12A (supplied)	-

MAXIMUM RATINGS (Absolute Maximum Values)

Parameter		Value	Unit
Supply Voltage	Between Anode and Cathode	1250	Vdc
	Between Anode and Last Dynode	250	Vdc
Average Anode Current		0.1	mA

CHARACTERISTICS (at 25°C)

Parameter		Min.	Typ.	Max.	Unit
Cathode Sensitivity	Luminous (2856K)	70	90	-	μ A/lm
	Radiant at 420nm	-	85	-	mA/W
	Blue (CS - 5-58 filter)	9	10.5	-	μ A/lm-b
	Quantum Efficiency at 390nm	-	26	-	%
Anode Sensitivity	Luminous (2856K)	10	45	-	A/lm
	Radiant at 420nm	-	4.3 × 10 ⁴	-	A/W
Gain		-	5.0 × 10 ⁵	-	-
Anode Dark Current (after 30min. storage in darkness)		-	3	5	nA
Time Response	Anode Pulse Rise Time	-	2.5	-	ns
	Electron Transit Time	-	32	-	ns
	Transit Time Spread (FWHM)	-	2.2	-	ns

NOTE: Anode characteristics are measured with the voltage distribution ratio shown below.

VOLTAGE DISTRIBUTION RATIO AND SUPPLY VOLTAGE

Electrodes	K	Dy1	Dy2	Dy3	Dy4	Dy5	Dy6	Dy7	Dy8	Dy9	Dy10	P
Ratio	2	1	1	1	1	1	1	1	1	1	1	1

Supply Voltage : 1000Vdc, K : Cathode, Dy : Dynode, P : Anode

ENVIRONMENTAL TESTING

Shoch 100g's, 11 ± 1ms, 3 impact shocks per direction (6 directions)

Vibration 20g's, 50 to 2000Hz, 1 oct per minute, 3 sweeps per axis (3 axes)

PHOTOMULTIPLIER TUBE R3886

Figure 1: Typical Spectral Response

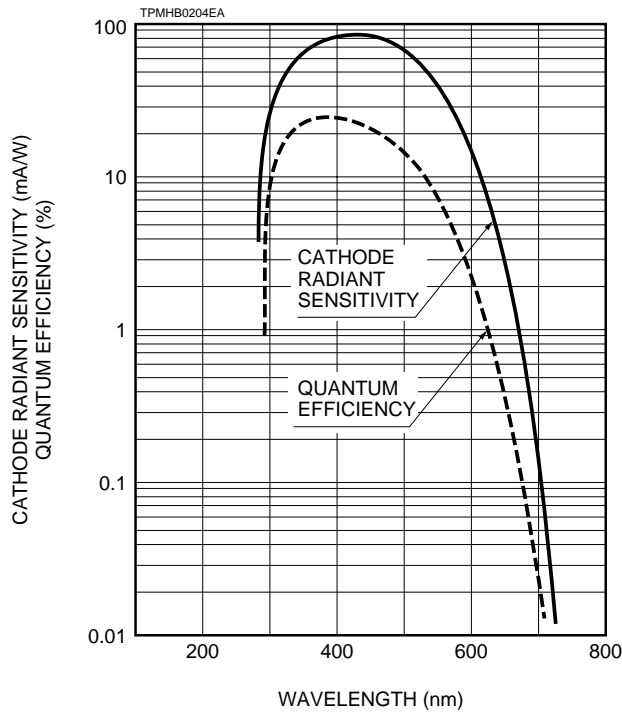
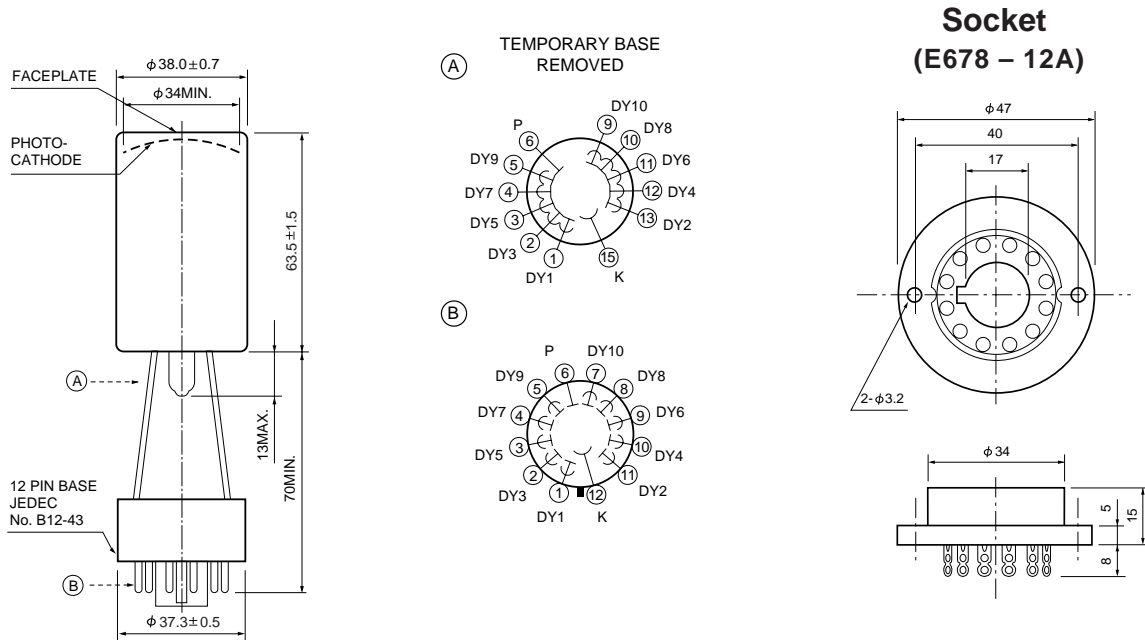


Figure 2: Dimensional Outline and Basing Diagram (Unit : mm)



TPMHA0104EA

TACCA0009EB

HAMAMATSU

HAMAMATSU PHOTONICS K.K., Electoron 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, 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.: Via Della Moia, 1/E, 20020 Arese, (Milano), Italy, Telephone: (39)2-935 81 733, Fax: (39)2-935 81 741

TPMH1076E01
FEB. 1994