

**For Photon Counting, Low Light Level Detection
13mm(1/2 Inch) Diameter, Low Noise Bialkali Photocathode
Borosilicate Glass Window, 10-stage, Head-On Type**

GENERAL

Parameter		Description/Value	Unit
Spectral Response		300 to 650	nm
Wavelength of Maximum Response		375	nm
Photocathode	Material	Low noise bialkali	—
	Minimum Effective Area	10	mm dia.
Window Material		Borosilicate glass	—
Dynode	Structure	Linear focused	—
	Number of Stages	10	—
Direct Interelectrode Capacitances	Anode to Last Dynode	1.0	pF
	Anode to All Other Electrodes	2.0	pF
Base		13-pin glass base	—
Suitable Socket		E678-13A(supplied)	—

MAXIMUM RATINGS (Absolute Maximum Values)

Parameter		Value	Unit
Supply Voltage	Between Anode and Cathode	1500	Vdc
	Between Anode and Last Dynode	250	Vdc
Average Anode Current		0.03	mA
Ambient Temperature		-80 to +50	°C

CHARACTERISTICS (at 25°C)

Parameter		Min.	Typ.	Max.	Unit
Cathode Sensitivity	Luminous (2856K)	25	40	—	μ A/lm
	Radiant at 375nm	—	50	—	mA/W
	Blue (CS-5-58 filter)	3.5	5.5	—	μ A/lm-b
Anode Sensitivity	Luminous (2856K)	50	200	—	A/lm
	Radiant at 375nm	—	2.5×10^5	—	A/W
Gain		—	5.0×10^6	—	—
Anode Dark Current (after 30min. storage in darkness)		—	0.5	4.0	nA
Anode Dark Counts		—	10	30	cps
Time Response	Anode Pulse Rise Time	—	2.2	—	ns
	Electron Transit Time	—	22	—	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 : 1250Vdc, K : Cathode, Dy : Dynode, P : Anode

PHOTOMULTIPLIER TUBE R2557

Figure 1: Typical Spectral Response

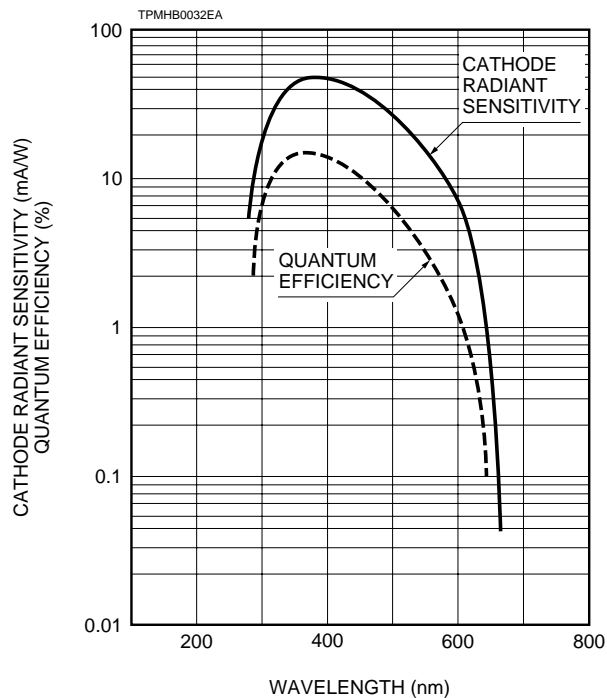


Figure 2: Typical Gain and Anode Dark Current

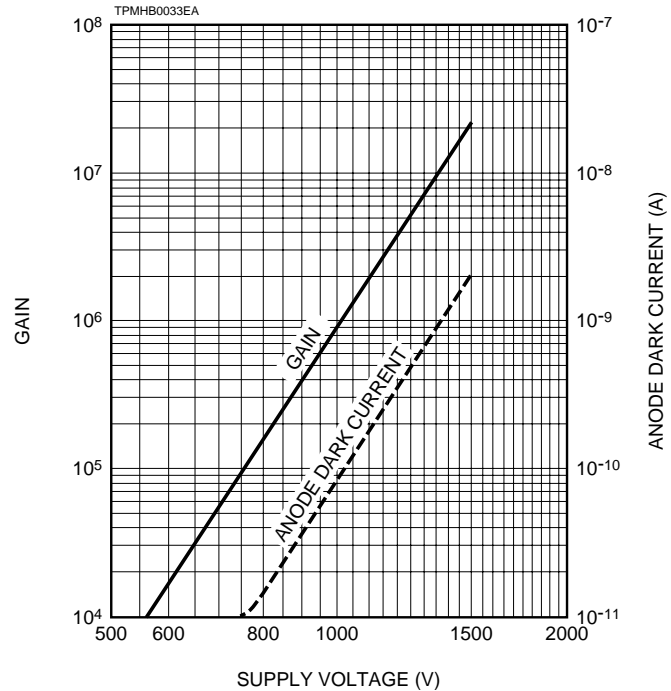
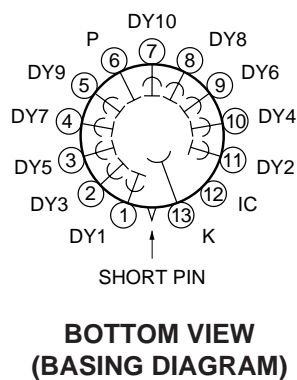
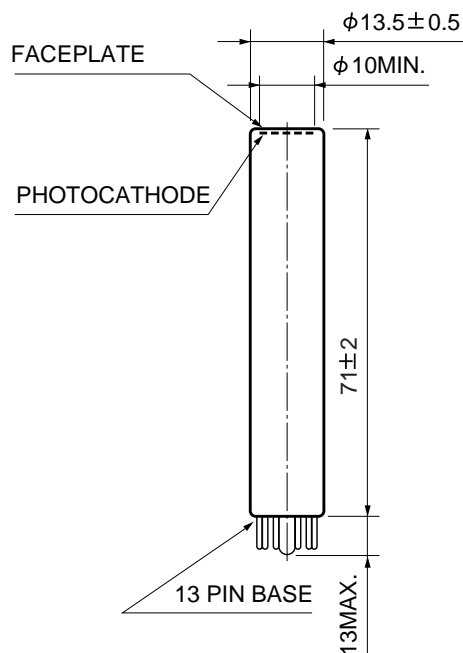
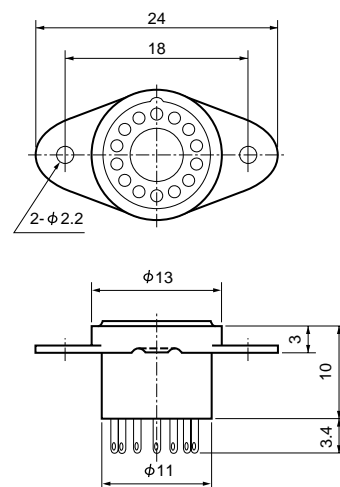


Figure 3: Dimensional Outline and Basing Diagram (Unit : mm)



Socket
(E678 - 13A)



TPMHA0014EA

TACCA0005EA

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