

28mm(1-1/8 Inch) Diameter, 11-stage, Bialkali Photocathode, Head-On Type, Low Dark Current, High Stability

GENERAL

Parameter		Description/Value	Unit
Spectral Response		185 to 650	nm
Wavelength of Maximum Response		420	nm
Photocathode	Material	Bialkali	–
	Minimum Effective Area	25	mm dia.
Window Material		UV glass	–
Dynode	Structure	Box and Line	–
	Number of Stages	11	–
Base		14-pin glass base	–
Suitable Socket		E678-14C (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		0.1	mA
Ambient Temperature		-80 to +50	°C

CHARACTERISTICS (at 25 °C)

Parameter		Min.	Typ.	Max.	Unit
Cathode Sensitivity	Luminous (2856K)	60	95	–	μ A/lm
	Radiant at 420nm	–	88	–	mA/W
	Blue (CS-5-58 filter)	–	11	–	μ A/lm-b
Anode Sensitivity	Luminous (2856K)	50	200	–	A/lm
	Radiant at 420nm	–	1.8×10^5	–	A/W
Gain		–	2.1×10^6	–	–
Anode Dark Current (after 30min. storage in darkness)		–	2	10	nA
Time Response	Anode Pulse Rise Time	–	4	–	ns
	Electron Transit Time	–	30	–	ns
	Transit Time Spread (FWHM)	–	3	–	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	Dy11	P
Ratio	1	1	1	1	1	1	1	1	1	1	1	1	1

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

PHOTOMULTIPLIER TUBE R7449

Figure 1: Typical Spectral Response

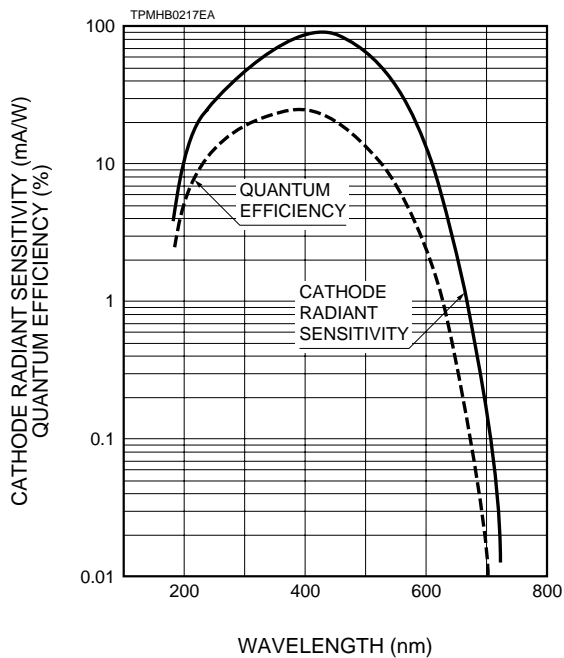


Figure 2: Typical Gain

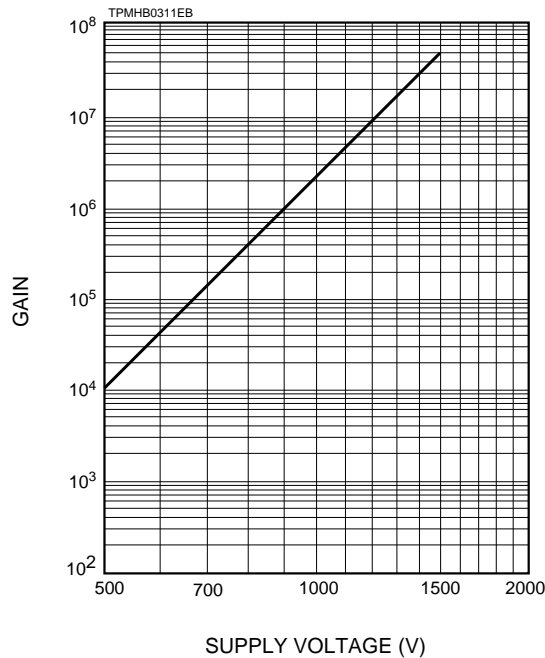
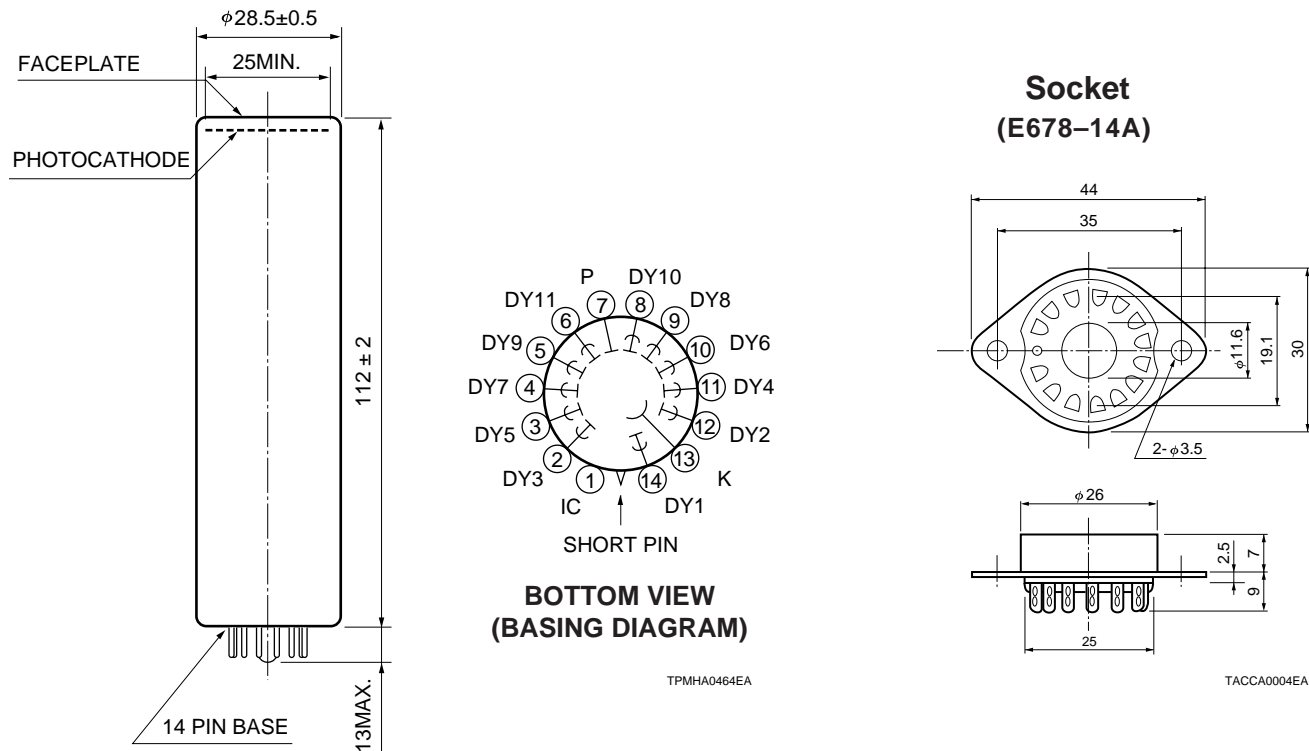


Figure 3: Dimensional Outline and Basing Diagram (Unit: mm)



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