

For Scintillation Counting, 127mm(5 Inch) Diameter Bialkali Photocathode, 10-Stage, Head-On Type

GENERAL

Parameter		Description/Value	Unit
Spectral Response		300 to 650	nm
Wavelength of Maximum Response		420	nm
Photocathode Material	Material	Bialkali	—
	Minimum Effective Area	111	mm dia.
Window	R877	Borosilicate glass	—
	R877-01	K- free Borosilicate glass	—
Dynode	Structure	Box and Grid	—
	Number of Stages	10	—
Direct Interelectrode Capacitances	Anode to Last Dynode	6	pF
	Anode to All Other Electrodes	7	pF
Base		14 pin base JEDEC No. B14-38	—
Suitable Socket		E678-14A(option)	—

MAXIMUM RATINGS (Absolute Maximum Values)

Parameter		Value	Unit
Supply Voltage	Between Anode and Cathode	1500	Vdc
	Between Anode and Last Dynode	300	Vdc
Average Anode Current		0.1	mA
Ambient Temperature		-30 to +50	°C

CHARACTERISTICS (at 25°C)

Parameter		Min.	Typ.	Max.	Unit
Cathode Sensitivity	Luminous (2856K)	60	80	—	μA/lm
	Radiant at 420nm	—	80	—	mA/W
	Blue (CS 5-58 filter)	—	10	—	μA/lm-b
Anode Sensitivity	Luminous (2856K)	20	40	—	A/W
	Radiant at 420nm	—	4 × 10 ⁴	—	A/W
Gain		—	5.0 × 10 ⁵	—	—
Anode Dark Current (after 30min. storage in darkness)		—	10	50	nA
Time Response	Anode Pulse Rise Time	—	10	—	ns
	Electron Transit Time	—	90	—	ns

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

VOLTAGE DISTRIBUTION RATIO AND SUPPLY VOLTAGE

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

Supply Voltage : 1250Vdc, K : Cathode, Dy : Dynode, P : Anode, G:Grid

PHOTOMULTIPLIER TUBES R877, R877-01

Figure 1: Typical Spectral Response

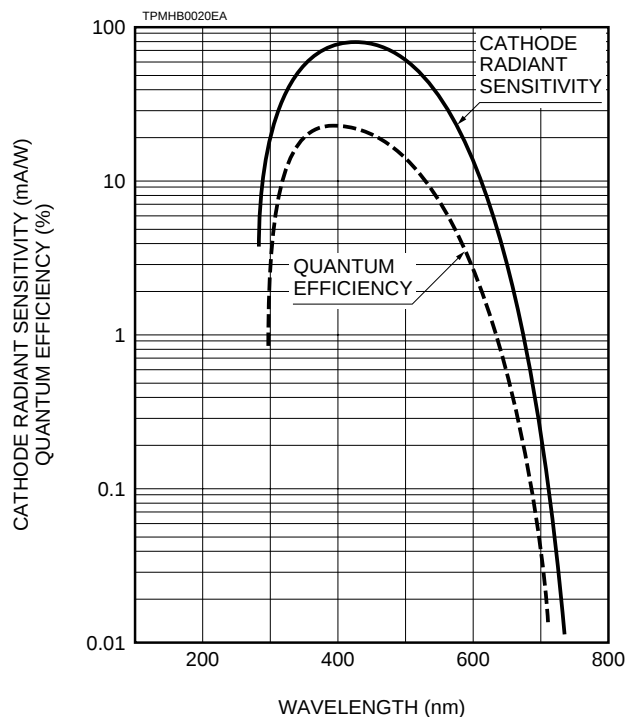
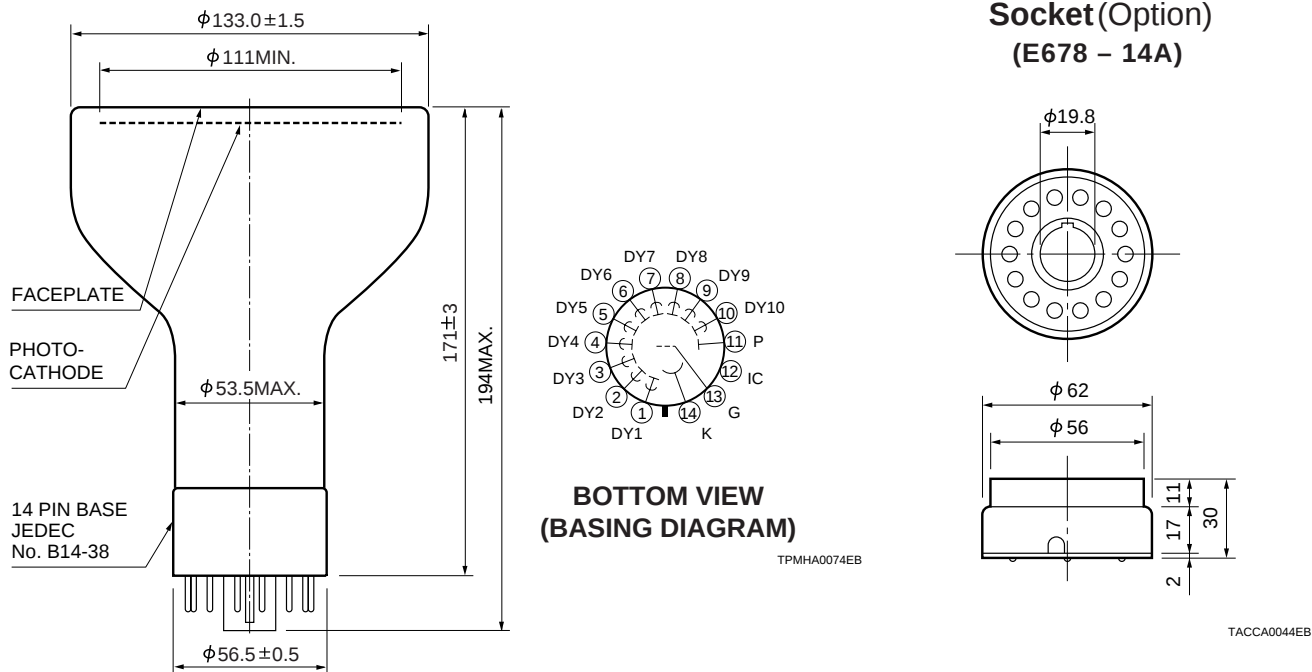


Figure 2: Dimensional Outline and Basing Diagram (Unit: mm)



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