HAMAMATSU

PHOTON IS OUR BUSINESS

PHOTOMULTIPLIER TUBEs
R1464, R1617

19 mm (3/4 Inch) Diameter, S-20 Spectral Response Multialkali Photocathode, 10-Stage, Head-on Type

GENERAL

Parameter		Description / Value	Unit
Spectral Response	R1464	185 to 850	nm
	R1617	300 to 850	nm
Wavelength of Maximum Response		420	nm
Photocathode	Material	Multialkali	—
	Minimum Effective Area	ϕ15	mm
Window Material	R1464	UV glass	—
	R1617	Borosilicate glass	—
Dynode	Structure	Linear focused	—
	Number of Stages	10	—
Operating Ambient Temperature		-30 to +50	°C
Storage Temperature		-80 to +50	°C
Base		12-pin glass base	—
Suitable Socket		E678-12L (supplied)	—

MAXIMUM RATINGS (Absolute Maximum Values)

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

CHARACTERISTICS (at 25°C)

Parameter		Min.	Typ.	Max.	Unit
Cathode Sensitivity	Luminous (2856 K)	80	120	—	μA/lm
	Radiant at 420 nm	—	51	—	mA/W
	Red/White Ratio (with R-68 filter)	—	0.2	—	—
Anode Sensitivity	Luminous (2856 K)	30	120	—	A/lm
	Radiant at 420 nm	—	5.1×10^4	—	A/W
Gain		—	1.0×10^6	—	—
Anode Dark Current (after 30 min storage in darkness)		—	4	20	nA
Time Response	Anode Pulse Rise Time	—	2.5	—	ns
	Electron Transit Time	—	27	—	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: 1000 V, K: Cathode, Dy: Dynode, P: Anode

Subject to local technical requirements and regulations, availability of products included in this promotional material may vary. Please consult with our sales office.
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Figure 1: Typical Spectral Response

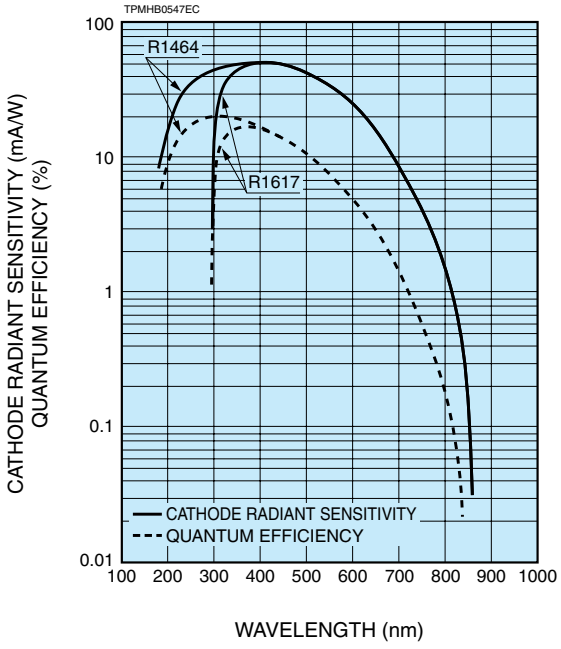


Figure 2: Typical Gain Characteristics

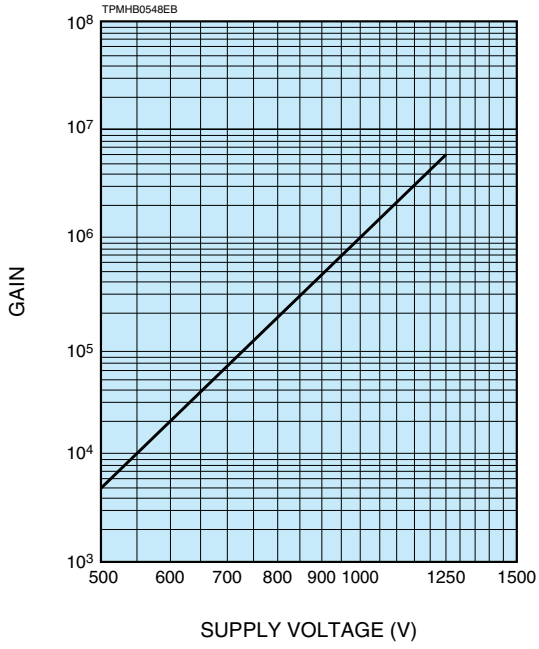


Figure 3: Dimensional Outline and Basing Diagram (Unit: mm)

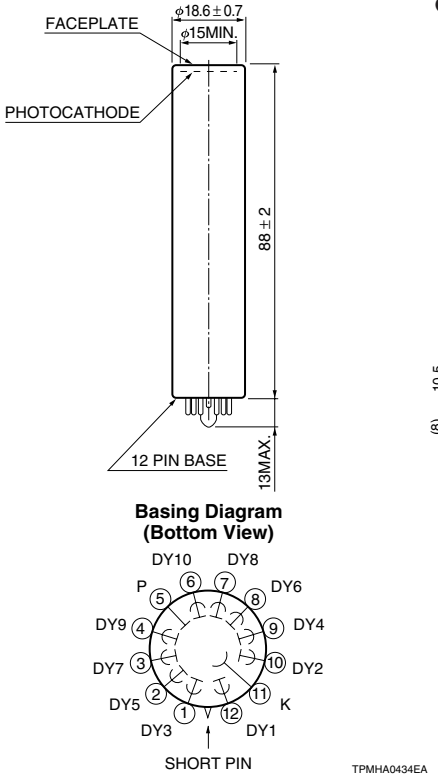
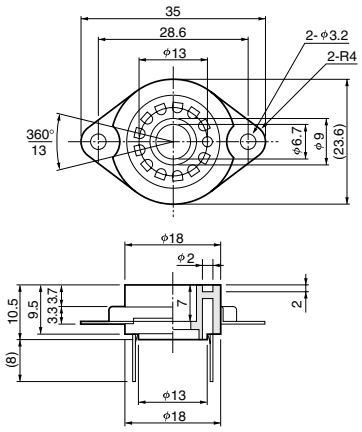
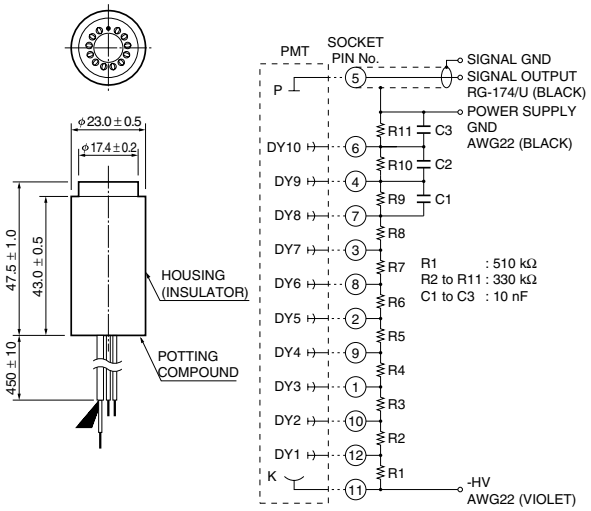


Figure 4: Accessories (Unit: mm)

●Socket E678–12L (Supplied)



●D-type Socket Assembly E974-13 (Sold separately)



* HAMAMATSU also provides high voltage power supply modules C4900 series and C10940 series.

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