

300 nm to 850 nm Response (S-20) 51 mm (2 Inch) Diameter, 10-stage, Head-on Type

GENERAL

Parameter		Description/Value	Unit
Spectral Response		300 to 850	nm
Wavelength of Maximum Response		420	nm
Photocathode	Material	Multialkali	—
	Minimum Effective Area	φ46	mm
Window Material		Borosilicate glass	—
Dynode	Structure	Box and Grid	—
	Number of Stages	10	—
Base		14-pin base JEDEC No. B14-38	—
Operating Ambient Temperature		-30 to +50	°C
Storage Temperature		-30 to +50	°C
Suitable Socket		E678-14W (Sold Separately)	—

MAXIMUM RATINGS (Absolute Maximum Values)

Parameter		Value	Unit
Supply Voltage	Between Anode and Cathode	1500	V
	Between Anode and Last Dynode	250	V
Average Anode Current		0.3	mA

CHARACTERISTICS (at 25 °C)

Parameter		Min.	Typ.	Max.	Unit
Cathode Sensitivity	Luminous (2856 K)	100	150	—	μA/lm
	Radiant at 420 nm	—	64	—	mA/W
	Red/White Ratio (R-68)	—	0.2	—	—
Anode Sensitivity	Luminous (2856 K)	20	100	—	A/lm
	Radiant at 420 nm	—	4.3×10^4	—	A/W
Gain		—	6.7×10^5	—	—
Anode Dark Current (after 30 minutes storage in darkness)		—	10	30	nA
Time Response	Anode Pulse Rise Time	—	9.0	—	ns
	Electron Transit Time	—	70	—	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	1

Supply Voltage: 1000 V, K: Cathode, G: Grid, Dy: Dynode, P: Anode

PHOTOMULTIPLIER TUBE R550

Figure 1: Typical Spectral Response

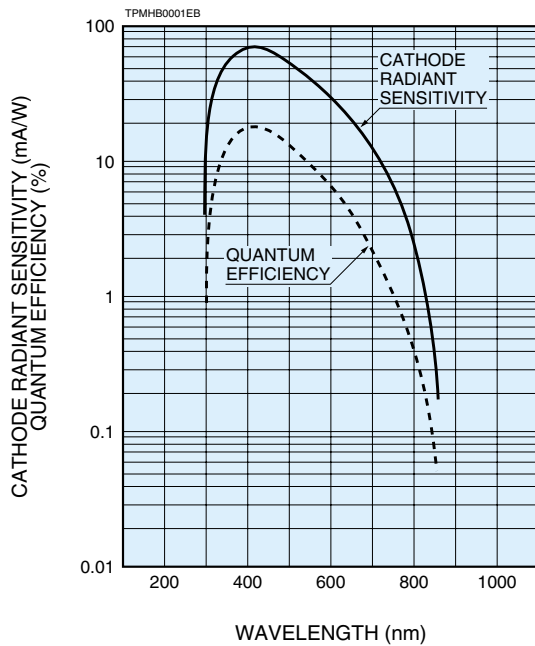


Figure 2: Typical Gain Characteristics

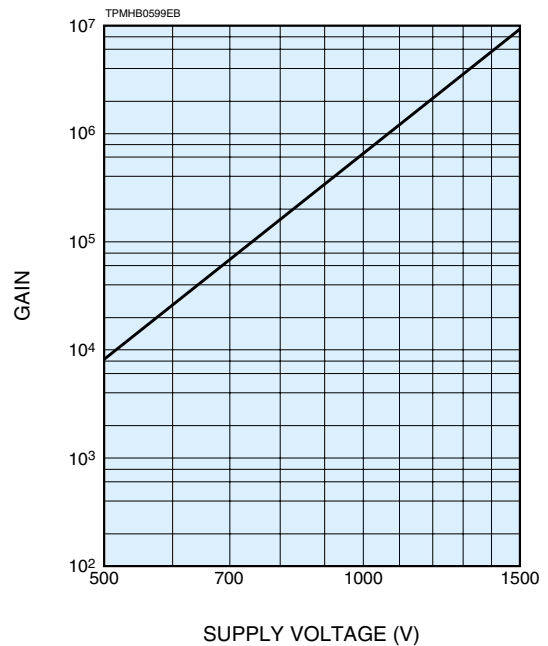
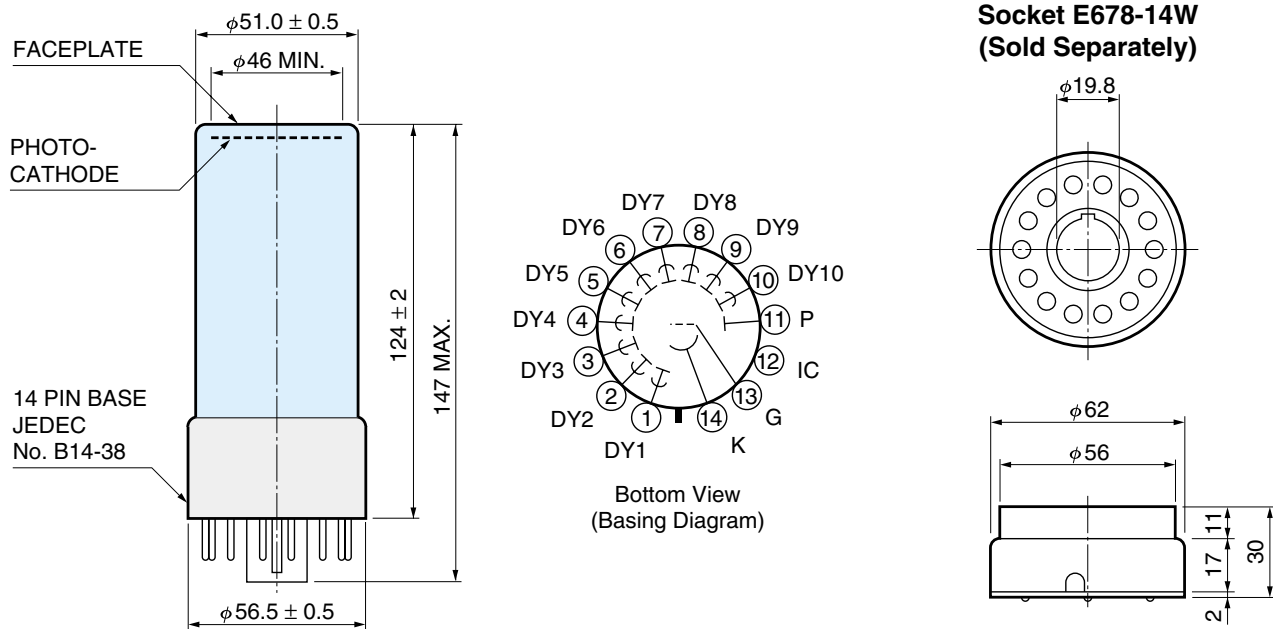


Figure 3: Dimensional Outline and Basing Diagram (Unit: mm)



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