

**For Scintillation Counting, 25 mm (1 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
Window Material		Borosilicate glass	—
Photocathode	Material	Bialkali	—
	Minimum Effective Area	φ22	mm
Dynode	Structure	Linear focused	—
	Number of Stages	10	—
Base		JEDEC No. B12-43 / Flying lead type	—
Operating Ambient Temperature		-30 to +50	°C
Storage Temperature		-80 to +50	°C
Suitable Socket		E678-12A (supplied)	—

**MAXIMUM RATINGS (Absolute Maximum Values)**

Parameter		Value	Unit
Supply Voltage	Between Anode and Cathode	1500	V
Average Anode Current		0.1	mA

**CHARACTERISTICS (at 25 °C)**

Parameter		Min.	Typ.	Max.	Unit
Cathode Sensitivity	Luminous (2856 K)	70	95	—	μA/lm
	Blue Sensitivity Index (CS 5-58)	9	11	—	—
Anode Sensitivity	Luminous (2856 K)	—	250	—	A/lm
Gain		—	2.6 × 10 <sup>6</sup>	—	—
Anode Dark Current (after 30 min storage in darkness)		—	2	15	nA
Time Response	Anode Pulse Rise Time	—	2.5	—	ns
	Electron Transit Time	—	28	—	ns
	Transit Time Spread (FWHM)	—	1.2	—	ns
Pulse Linearity (±2 % deviation)		—	5	—	mA

**NOTE:** Anode characteristics are measured with a voltage distribution ratio and supply voltage shown below.

**VOLTAGE DISTRIBUTION RATIO AND SUPPLY VOLTAGE**

Electrodes	K	Dy1	Dy2	Dy3	Dy4	Dy5	Dy6	Dy7	Dy8	Dy9	Dy10	P
Ratio	3	1	1.5	1	1	1	1	1	1	1	1	1

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

# PHOTOMULTIPLIER TUBE R8619

Figure 1: Typical Spectral Response

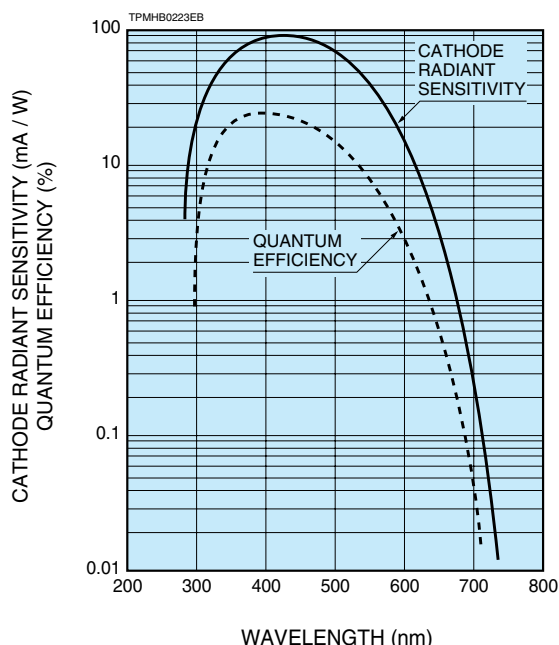


Figure 2: Typical Gain

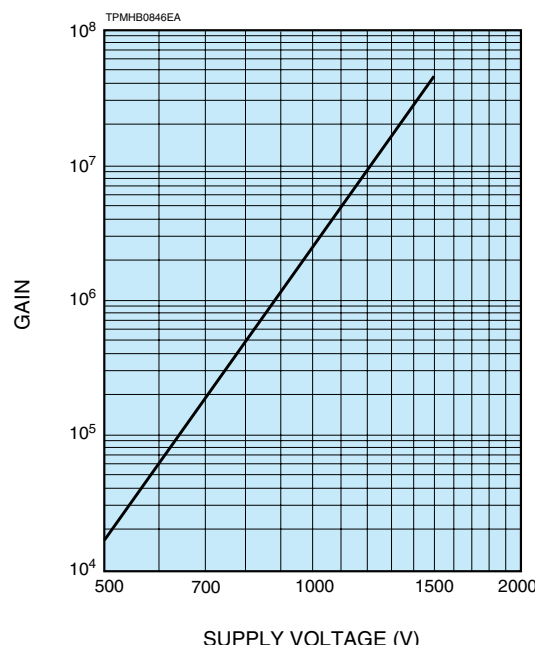
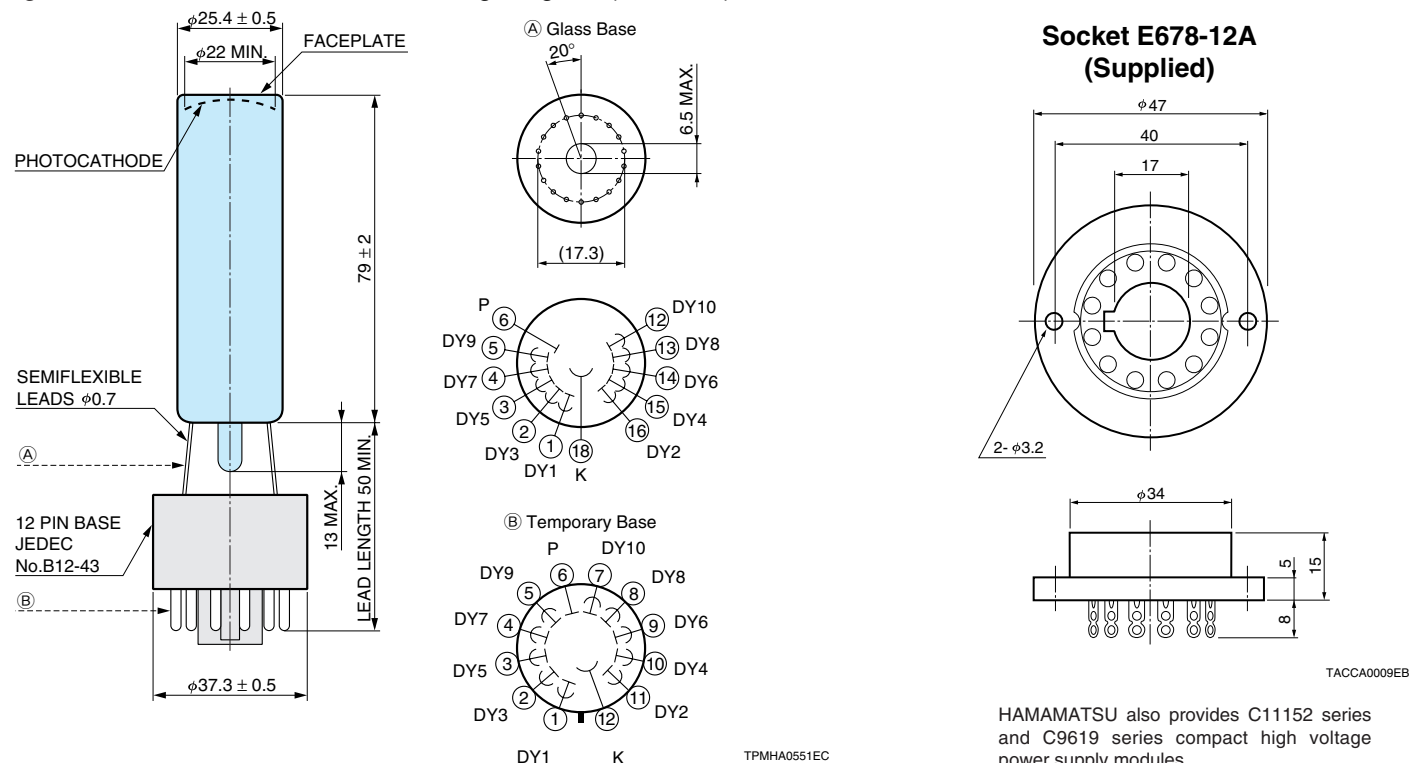


Figure 3: Dimensional Outline and Basing Diagram (Unit: mm)



## NOTES

The material in the R8619 contains Copper-Beryllium (CuBe) Alloy. Please follow the applicable regulations regarding disposal of hazardous materials and industrial wastes in your country, state, region or province.

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