

FEATURES

- Low dark current
- High gain
- High stability
- Low profile (R6094)

APPLICATIONS

- Radiation measurement
- SEM (scanning electron microscope)



Left: R6094, Right: R6095

SPECIFICATIONS

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	φ25	mm
Dynode	Structure	Box and line	—
	Number of stages	11	—
Base		14-pin glass base	—
Operating ambient temperature		-30 to +50	°C
Storage temperature		-80 to +50	°C
Suitable socket (supplied)		E678-14C	—

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		0.1	mA

CHARACTERISTICS (Typ.) (at 25 °C)

Parameter		Min.	Typ.	Max.	Unit
Cathode sensitivity	Luminous (2856 K)	60	95	—	μA/lm
	Radiant at 420 nm	—	88	—	mA/W
	Blue sensitivity index	7.0	11.0	—	—
Anode sensitivity	Luminous (2856 K)	50	200	—	A/lm
	Radiant at 420 nm	—	1.8×10^5	—	A/W
Gain		—	2.1×10^6	—	—
Anode dark current (After 30 minute storage in darkness)		—	2	10	nA
Time response	Anode pulse rise time	—	4	—	ns
	Electron transit time	—	30	—	ns

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	Dy11	P
Ratio	1	1	1	1	1	1	1	1	1	1	1	1	1

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

PHOTOMULTIPLIER TUBE R6094, R6095

Figure 1: Typical spectral response

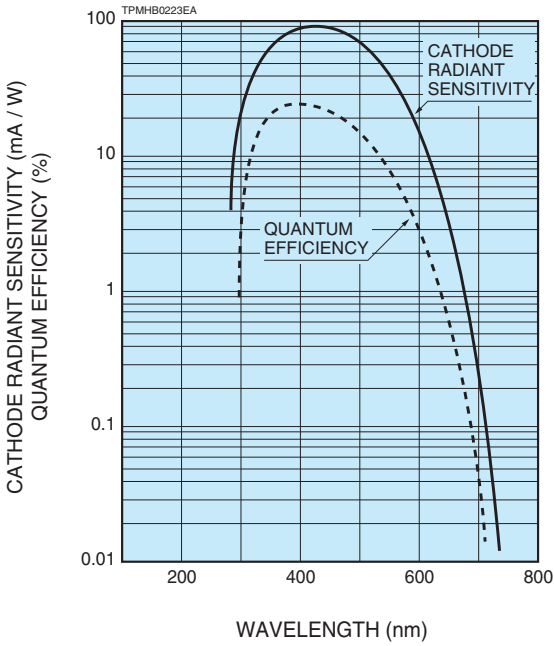


Figure 2: Typical gain

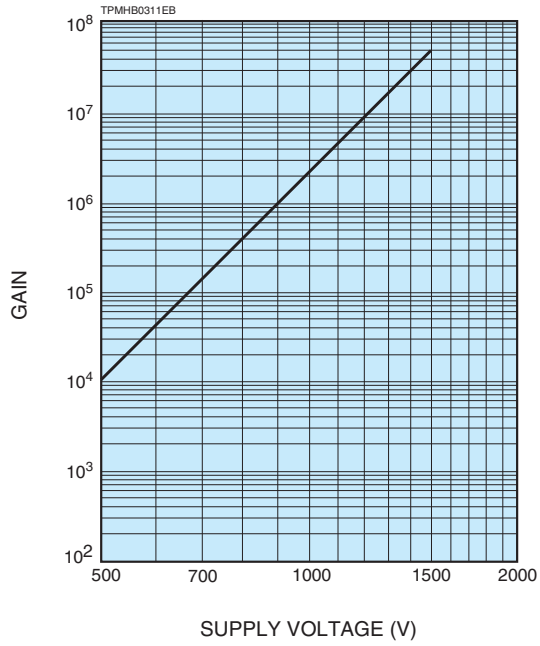
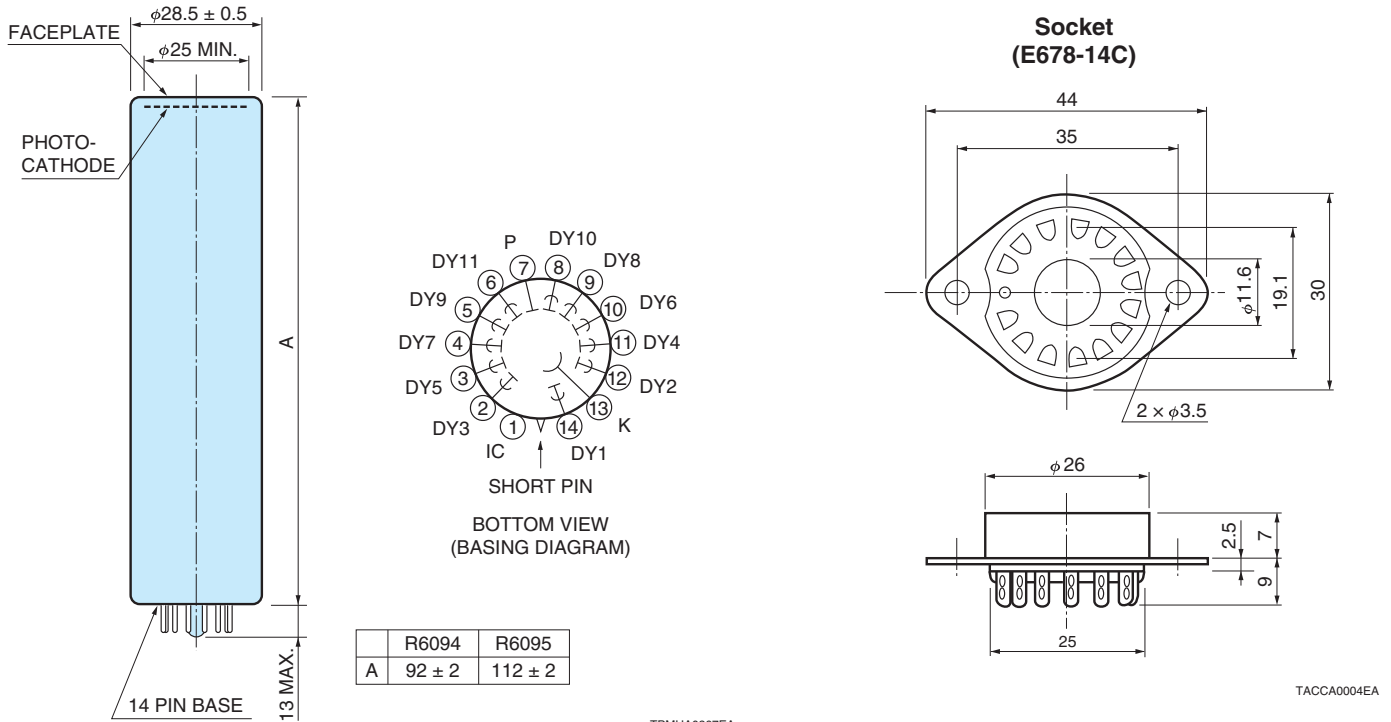


Figure 3: Dimensional outline and basin diagram (Unit: mm)



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