

FEATURES

- Fast time response
- High sensitivity in near IR range

APPLICATIONS

- Industrial measurement
- Particle counter
- NOx monitor



SPECIFICATIONS

GENERAL

Parameter		Description / Value	Unit
Spectral response		300 to 900	nm
Wavelength of maximum response		600	nm
Photocathode	Material	Extended red multialkali	—
	Minimum effective area	φ46	mm
Window material		Borosilicate glass	—
Dynode	Structure	Linear focused	—
	Number of stages	12	—
Operating ambient temperature		-30 to +50	°C
Storage temperature		-80 to +50	°C
Base		21-pin glass base	—
Suitable socket		E678-21C (supplied)	—

MAXIMUM RATINGS (Absolute maximum values)

Parameter		Value	Unit
Supply voltage	Between anode and cathode	2500	V
	Between anode and last dynode	500	V
Average anode current		0.2	mA

CHARACTERISTICS (at 25 °C)

Parameter		Min.	Typ.	Max.	Unit
Cathode sensitivity	Luminous (2856 K)	140	230	—	μA/lm
	Radiant at 600 nm	—	50	—	mA/W
	Red / White ratio (R-68 filter)	—	0.35	—	—
Anode sensitivity	Luminous (2856 K)	15	100	—	A/lm
	Radiant at 600 nm	—	2.2 × 10 ⁴	—	A/W
Gain		—	4.3 × 10 ⁵	—	—
Anode dark current (after 30 min storage in darkness)		—	30	100	nA
Time response	Anode pulse rise time	—	2.6	—	ns
	Electron transit time	—	48	—	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	Dy11	Dy12	P
Ratio	4	0	1	1.4	1	1	1	1	1	1	1	1	1	1	1

Supply voltage: 1500 V, K: Cathode, Dy: Dynode, G: Grid, P: Anode

*Shield is connected to Dy5.

PHOTOMULTIPLIER TUBE R2257

Figure 1: Typical spectral response

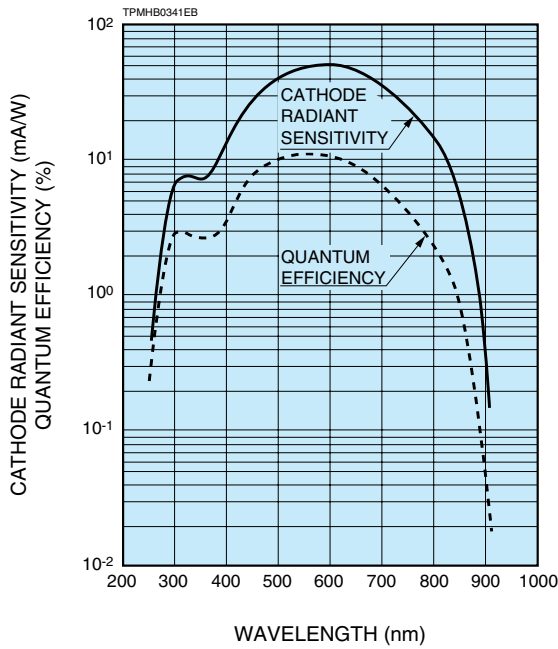


Figure 2: Typical gain characteristics

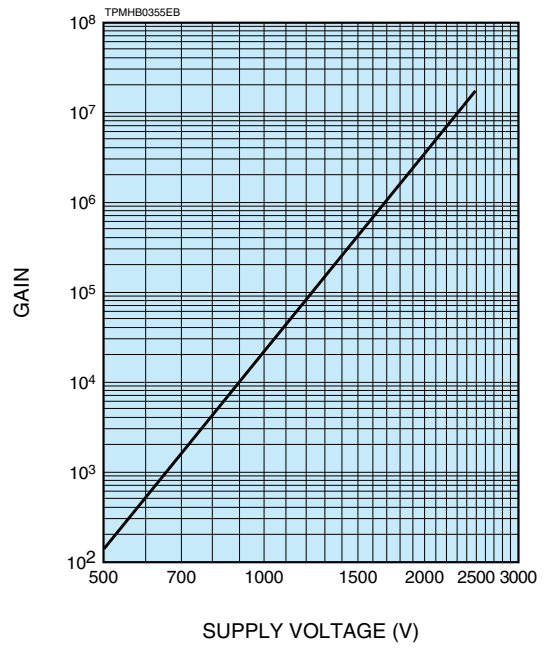
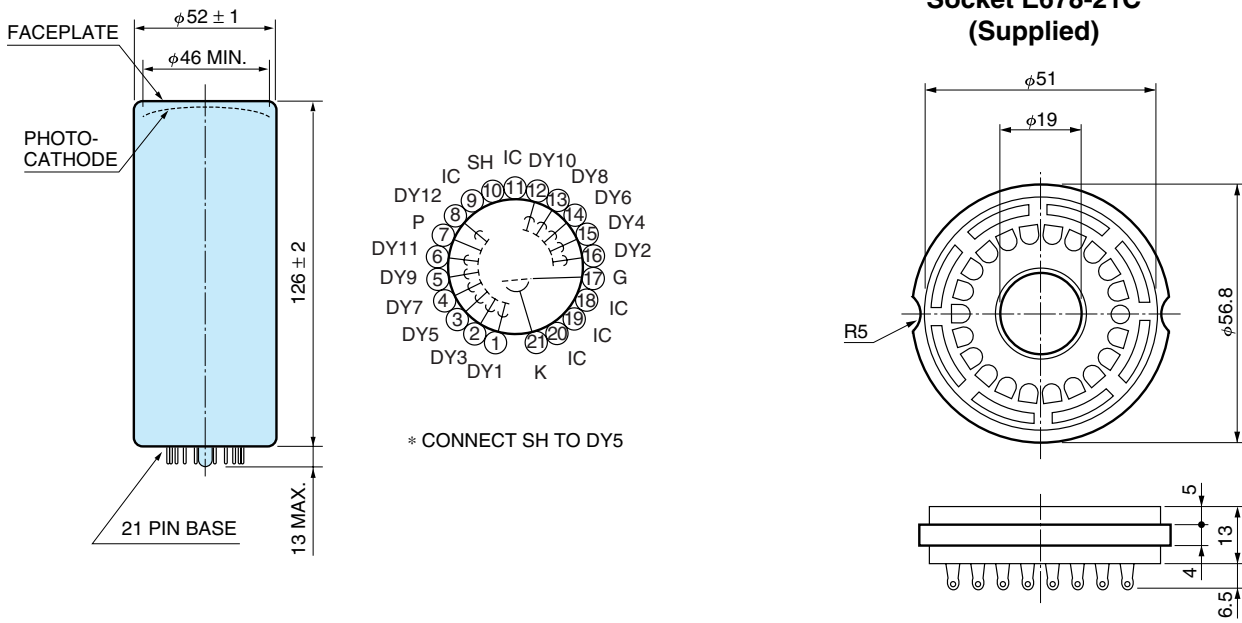


Figure 3: Dimensional outline and basing diagram (Unit: mm)



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