

**160 nm to 850 nm Response (Multialkali)
51 mm (2 Inch) Diameter, 10-stage, Head-on Type**

GENERAL

Parameter		Description / Value	Unit
Spectral Response*		160 to 850	nm
Wavelength of Maximum Response		420	nm
Photocathode	Material	Multialkali	—
	Minimum Effective Area	φ46	mm
Window Material		Synthetic Silica	—
Dynode	Structure	Box and Grid	—
	Number of Stages	10	—
Operating Ambient Temperature		-30 to +50	°C
Storage Temperature		-80 to +50	°C
Base		15-pin glass base	—
Suitable Socket		E678-15C (supplied)	—

* Operate in a nitrogen-purged environment for VUV detection.

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 (at 25 °C)

Parameter		Min.	Typ.	Max.	Unit
Cathode Sensitivity	Luminous (2856 K)	80	150	—	μA/lm
	Radiant at 420 nm	—	64	—	mA/W
	Red/White Ratio (R-68)	—	0.2	—	—
Anode Sensitivity	Luminous (2856 K)	20	80	—	A/lm
	Radiant at 420 nm	—	3.4 × 10 ⁴	—	A/W
Gain		—	5.3 × 10 ⁵	—	—
Anode Dark Current (after 30 min. storage in darkness)		—	5	20	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 dc, K: Cathode, Dy: Dynode, P: Anode

PHOTOMULTIPLIER TUBE R375

Figure 1: Typical Spectral Response

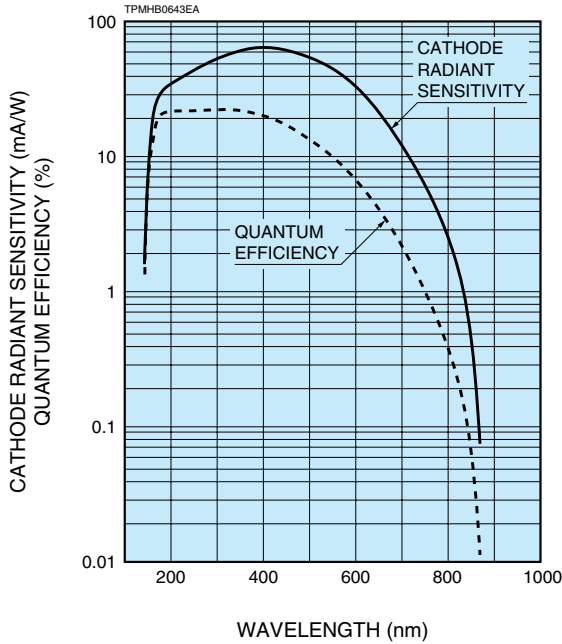


Figure 2: Typical Gain Characteristics

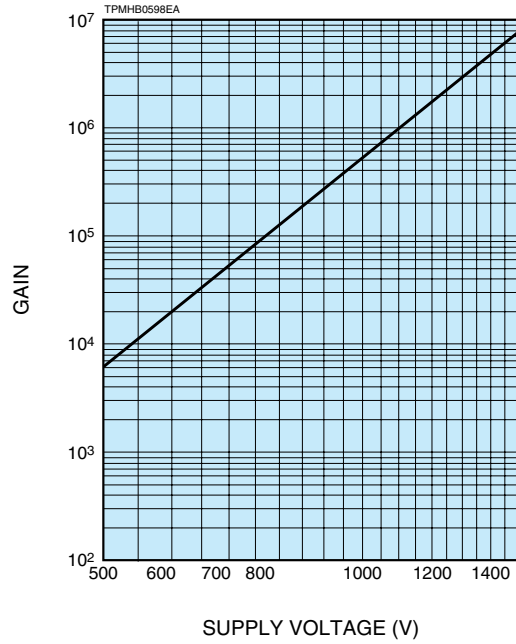
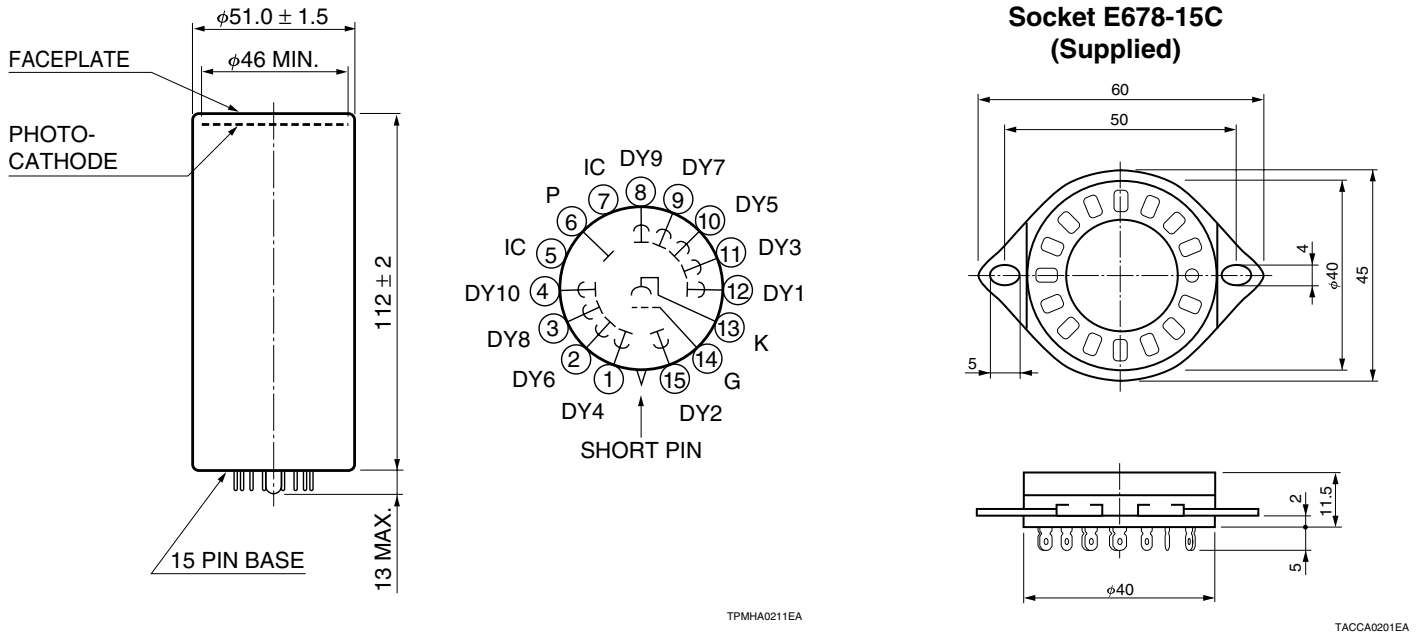


Figure 3: Dimensional Outline and Basing Diagram (Unit: mm)



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