

**Fast Time Response (Especially Narrow T.T.S.)  
13 mm (1/2 Inch) Diameter, 10-stage, Bialkali Photocathode, Head-on Type**

**GENERAL**

Parameter		Description / Value	Unit
Spectral Response		300 to 650	nm
Wavelength of Maximum Response		420	nm
Photocathode	Material	Bialkali	—
	Minimum Effective Area	φ10	mm
Window Material		Borosilicate glass	—
Dynode	Structure	Linear focused	—
	Number of Stages	10	—
Base		13-pin glass base	—
Operating Ambient Temperature		-30 to +50	°C
Storage Temperature		-80 to +50	°C
Weight		Approx. 7	g
Suitable Socket		E678-13F (supplied)	—

**MAXIMUM RATINGS (Absolute Maximum Values)**

Parameter		Value	Unit
Supply Voltage	Between Anode and Cathode	1250	V
	Between Anode and Last Dynode	250	V
Average Anode Current		0.03	mA

**CHARACTERISTICS (at 25 °C)**

Parameter		Min.	Typ.	Max.	Unit
Cathode Sensitivity	Luminous (2856 K)	40	100	—	μA/lm
	Radiant at 420 nm	—	80	—	mA/W
	Blue Sensitivity Index (CS 5-58)	—	10	—	—
Anode Sensitivity	Luminous (2856 K)	30	100	—	A/lm
Gain		—	1.0 × 10 <sup>6</sup>	—	—
Anode Dark Current (After 30 minute storage in darkness)		—	1	15	nA
Time Response	Anode Pulse Rise Time	—	1.1	—	ns
	Electron Transit Time	—	12	—	ns
	Transit Time Spread (FWHM)	—	0.5	—	ns

**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 Vdc, K: Cathode, Dy: Dynode, P: Anode

# PHOTOMULTIPLIER TUBE R4124

Figure 1: Typical Spectral Response

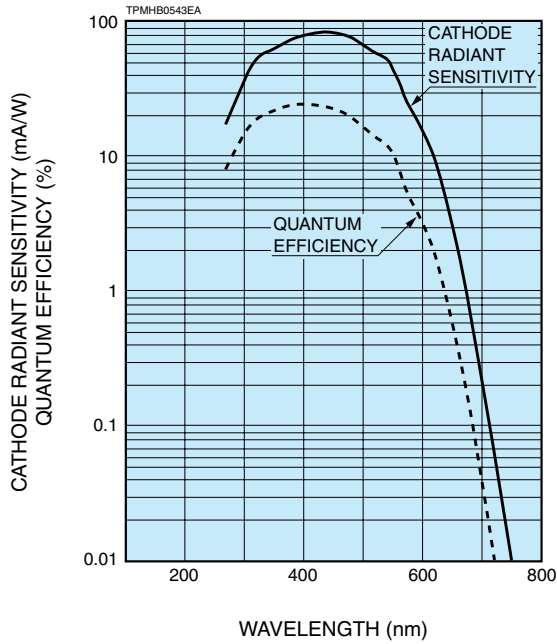


Figure 2: Typical Gain

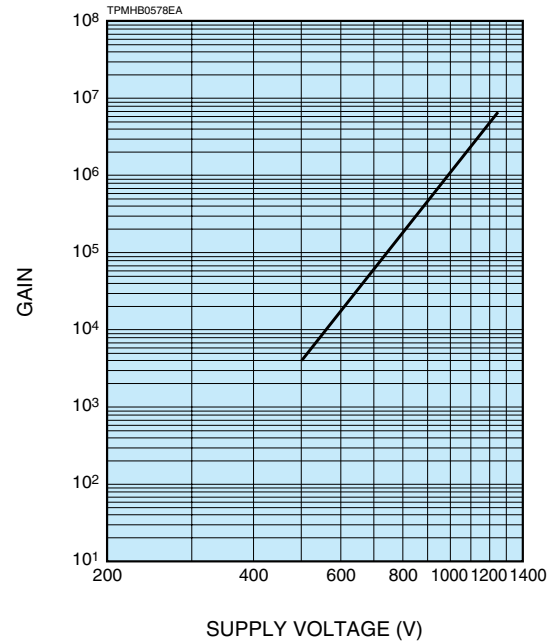
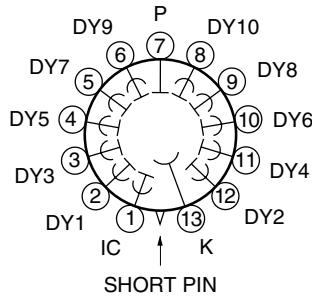
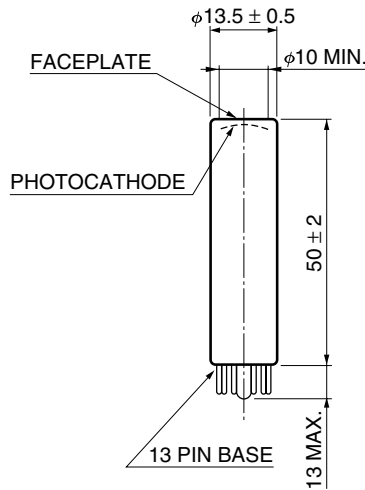
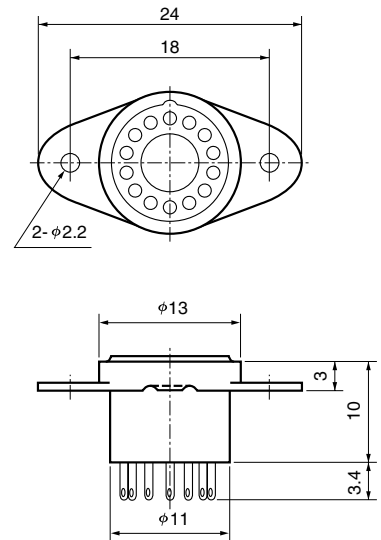


Figure 3: Dimensional Outline and Basing Diagram (Unit: mm)



TPMHA0102EA

Socket E678-13F (Supplied)



TACCA0005EA

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