

## Fast Time Response (Especially Narrow T.T.S.) 13mm (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	10	mm dia.
Window Material		Borosilicate glass	—
Dynode	Structure	Linear focused	—
	Number of Stages	10	—
Base		13-pin glass base	—
Weight		Approx. 7	g
Suitable Socket		E678-13A (supplied)	—

### MAXIMUM RATINGS (Absolute Maximum Values)

Parameter		Value	Unit
Supply Voltage	Between Anode and Cathode	1250	Vdc
	Between Anode and Last Dynode	350	Vdc
Average Anode Current		0.03	mA
Ambient Temperature		-80 to +50	°C

### CHARACTERISTICS (at 25°C)

Parameter		Min.	Typ.	Max.	Unit
Cathode Sensitivity	Luminous (2856K)	40	95	—	μA/lm
	Radiant at 420nm	—	76	—	mA/W
	Blue (CS 5-58 filter)	—	9.5	—	μA/lm-b
Anode Sensitivity	Luminous (2856K)	30	100	—	A/lm
Gain		—	$1.1 \times 10^6$	—	—
Anode Dark Current (after 30min. 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: 1000Vdc, K: Cathode, Dy: Dynode, P: Anode

# PHOTOMULTIPLIER TUBE R4124

Figure 1: Typical Spectral Response

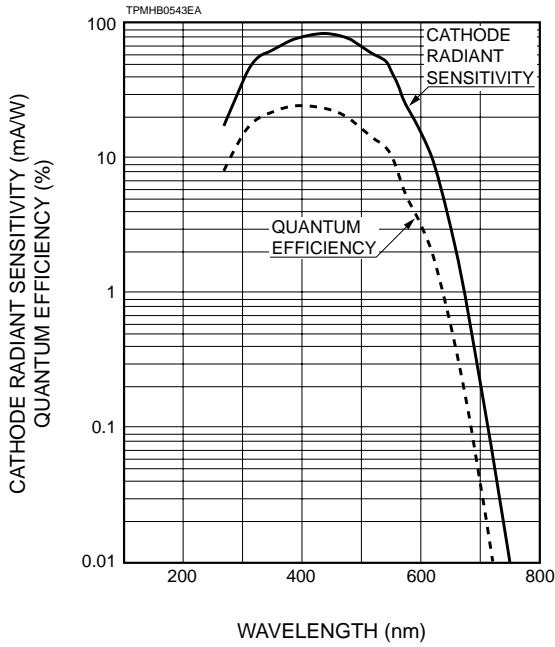


Figure 2: Typical Gain

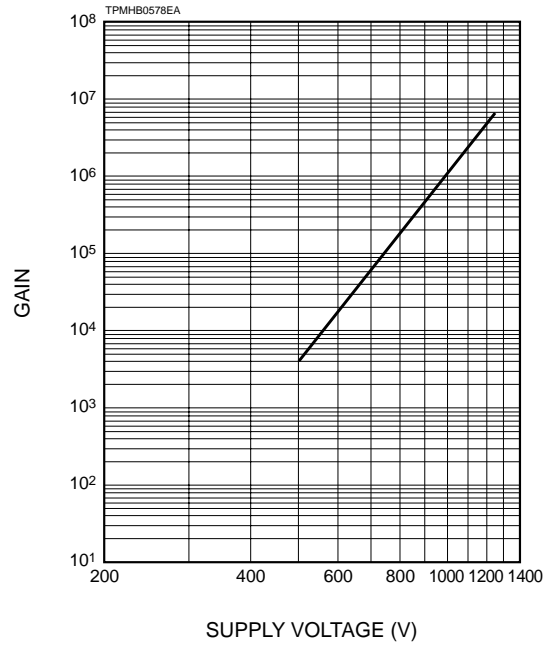
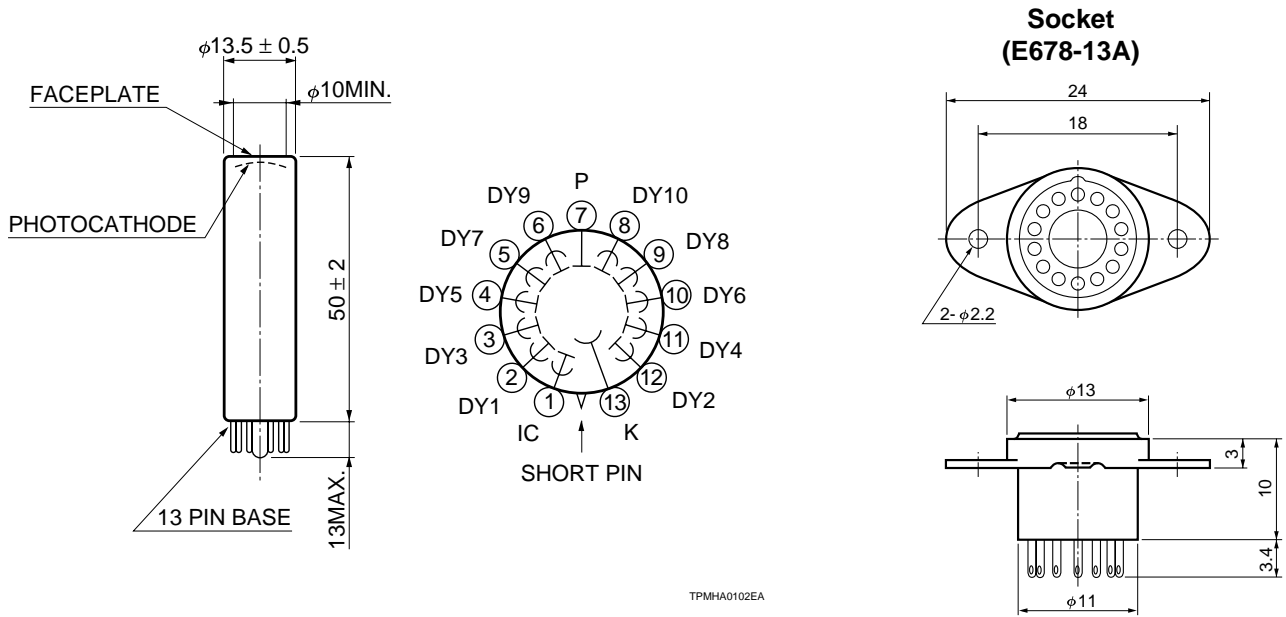


Figure 3: Dimensional Outline and Basing Diagram (Unit: mm)



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