

**For Astro-Physics and Other Ultra-Violet Radiation Detection  
13mm (1/2 Inch) Diameter, Head-on, 10-Stage, Cs-Te Photocathode**

## GENERAL

Parameter		Description/Value	Unit
Spectral Response		115 to 320	nm
Wavelength of Maximum Response		240	nm
Wavelength of Maximum Quantum Efficiency		200	nm
Photocathode	Material	Cs-Te	—
	Minimum Useful Size	6	mm dia.
Window Material		Mg-F <sub>2</sub>	—
Dynode	Structure	Linear focused	—
	Number of Stages	10	—
Direct Interelectrode Capacitances	Anode to Last Dynode	1.0	pF
	Anode to All Other Electrodes	2.0	pF
Base (temporary)		12-pin base (JEDEC No. B12-43)	—
Socket		E678-12A (supplied)	—

## MAXIMUM RATINGS (Absolute Maximum Values)

Parameter		Value	Unit
Supply Voltage	Between Anode and Cathode	1250	Vdc
	Between Anode and Last Dynode	250	Vdc
Average Anode Current		0.01	mA
Ambient Temperature		-80 to +50	°C

## CHARACTERISTICS (at 25°C)

Parameter	Min.	Typ.	Max.	Unit
Cathode Radiant Sensitivity at 254nm	—	28	—	mA/W
Anode Radiant Sensitivity at 254nm	—	$1.4 \times 10^4$	—	A/W
Quantum Efficiency at 200nm	—	17	—	%
Gain	—	$5.0 \times 10^5$	—	—
Anode Dark Current (after 30min. storage in darkness)	—	0.3	1	nA

## VOLTAGE DISTRIBUTION RATIO AND SUPPLY VOLTAGE

Electrodes	K	Dy1	Dy2	Dy3	Dy4	Dy5	Dy6	Dy7	Dy8	Dy9	Dy10	P
Ratio	1	1	1	1	1	1	1	1	1	1	1	1

Supply Voltage: 1000Vdc, K: Cathode, Dy: Dynode, P: Anode

# PHOTOMULTIPLIER TUBE R1080

Figure 1: Typical Spectral Response

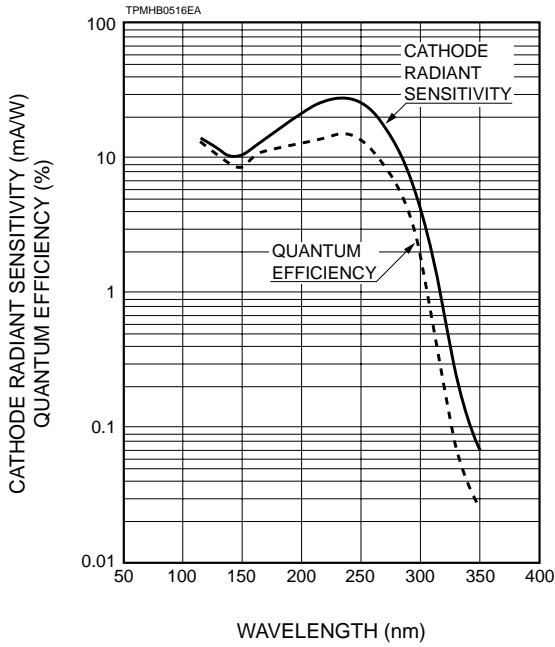


Figure 2: Typical Gain Characteristics

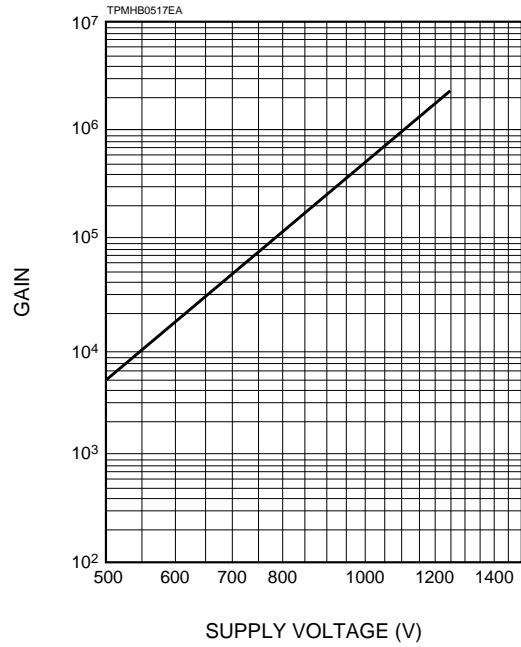
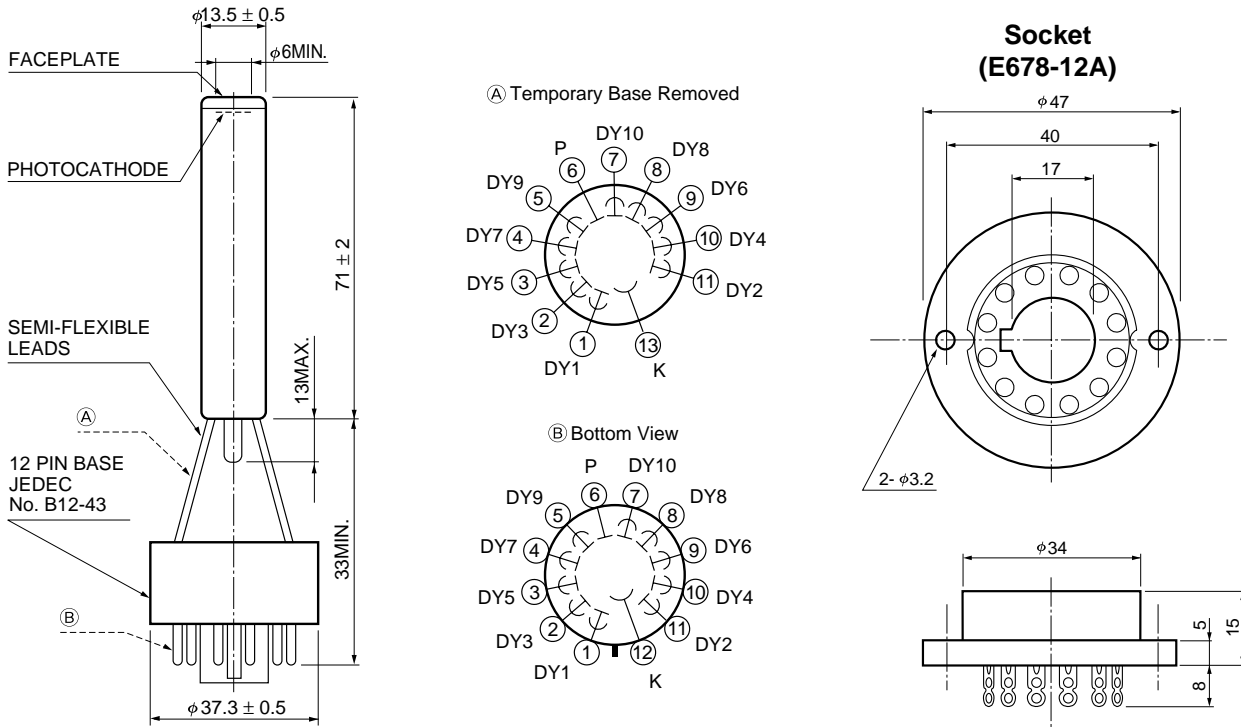


Figure 3: Dimensional Outline and Basing Diagram (Unit: mm)



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