HAMAMATSU

PHOTOMULTIPLIER TUBE 1P28

FEATURES

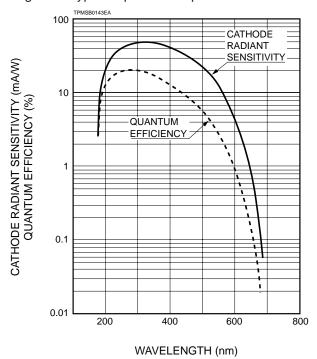
- 28mm (1-1/8 Inch) Diameter Side-on
- 185 to 650nm Spectral Response
- For UV to Visible Range Photocathode



GENERAL

	Parameter	Description/Value	Unit
Spectral Resp	onse	185 to 650	nm
Wavelength of	Maximum Response	340	nm
Photo-	Material	Sb-Cs	_
cathode	Minimum Useful Size	8 × 24	mm
Window Mater	ial	UV glass	_
Dynode	Structure	Circular-cage	_
	Number of Stages	9	_
Direct Interelectrode	Anode to Last Dynode	4	рF
Capacitances		6	рF
Base		JEDEC No. B11-88	_
Suitable Sock	et	E678-11A	_

Figure 1: Typical Spectral Response



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MAXIMUM RATINGS (Absolute Maximum Values)

	Parameter	Value	Unit
Supply Voltage	Between Anode and Cathode	1250	Vdc
Voltage	Between Anode and Last Dynode	250	Vdc
Average A	node Current	0.1	mA
Ambient Te	emperature	-80 to +50	°C

CHARACTERISTICS (at 25°C)

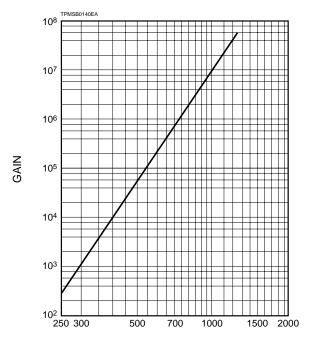
	Min.	lin. Typ.		Unit		
Anode	Luminous (2856K)	20	400	_	A/Im	
Sensitivity	Radiant at 400nm	_	4.8×10^{5}		A/W	
Cathode Sensitivity	Luminous (2856K)	25	40	_	μA/lm	
	Radiant at 400nm	_	48	_	mA/W	
	Quantum Efficiency at 340nm	_	21	_	%	
Gain	_	1.0×10^{7}	_			
Anode Dark Current (after 30 minute)		_	5	50	nA	
Time	Anode Pulse Rise Time	_	2.2		ns	
Response	Electron Transit Time	_	22	_	ns	

VOLTAGE DISTRIBUTION RATIO AND SUPPLY VOLTAGE

Electrodes	K	Dy	/1 D	y2	Dy3	Dy	4 D	y5	Dy6	D	y7	Dya	3 D	y9	P)
Ratio		1	1	1		1	1	1		1	1		1	1		

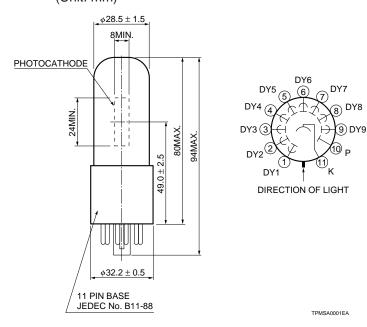
Supply Voltage: 1000Vdc, K: Cathode, Dy: Dynode, P: Anode

Figure 2: Typical Gain Characteristics

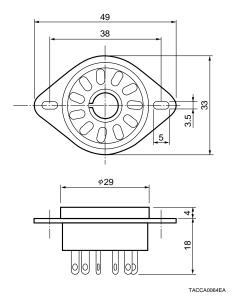


SUPPLY VOLTAGE (V)

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



Socket (Option) (E678-11A)



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