

FEATURES

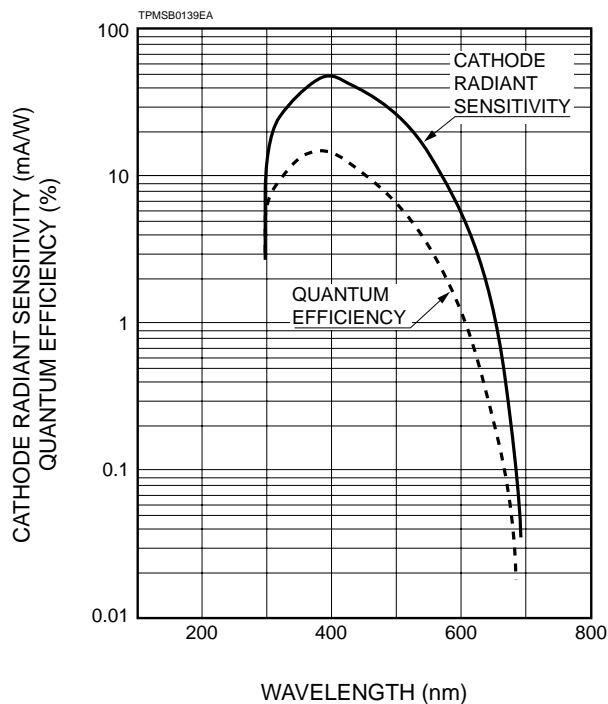
- 28mm (1-1/8 Inch) Diameter Side-on
- 300 to 650nm Spectral Response
- High Gain and Low Dark Current Variant of 931A



GENERAL

Parameter		Description/Value	Unit
Spectral Response		300 to 650	nm
Wavelength of Maximum Response		400	nm
Photo-cathode	Material	Sb-Cs	—
	Minimum Useful Size	8 × 24	mm
Window Material		Borosilicate glass	—
Dynode	Structure	Circular-cage	—
	Number of Stages	9	—
Direct Interelectrode Capacitances	Anode to Last Dynode	4	pF
	Anode to All Other Electrodes	6	pF
Base		JEDEC No. B11-88	—
Suitable Socket		E678-11A	—

Figure 1: Typical Spectral Response



PHOTOMULTIPLIER TUBE R105

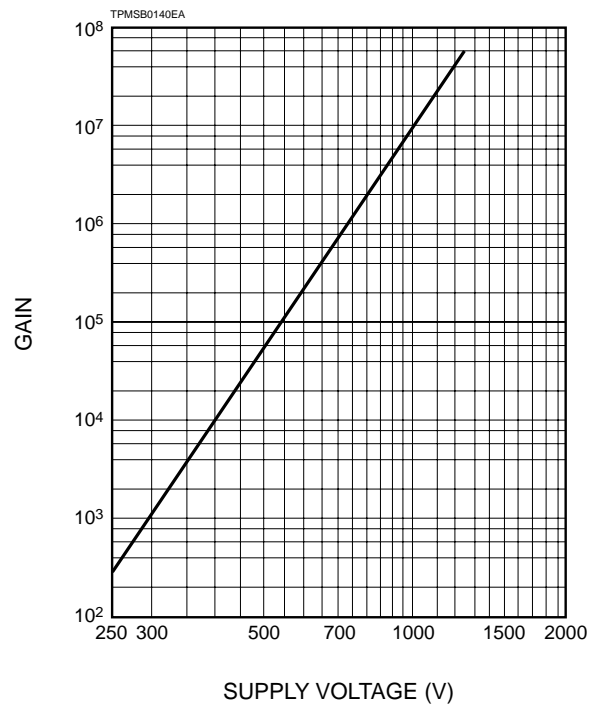
MAXIMUM RATINGS (Absolute Maximum Values)

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

CHARACTERISTICS (at 25°C)

Parameter	Min.	Typ.	Max.	Unit	
Anode Sensitivity	Luminous (2856K)	50	400	—	A/lm
	Radiant at 400nm	—	4.8×10^5	—	A/W
Cathode Sensitivity	Luminous (2856K)	25	40	—	$\mu\text{A/lm}$
	Radiant at 400nm	—	48	—	mA/W
	Quantum Efficiency	—	13 at 350nm	—	%
Gain	—	1.0×10^7	—	—	
Dark Current	after 5 seconds	—	10	50	nA
	after 30 minute	—	1	10	nA
Time Response	Anode Pulse Rise Time	—	2.2	—	ns
	Electron Transit Time	—	22	—	ns

Figure 2: Typical Gain Characteristics

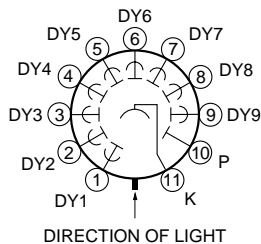
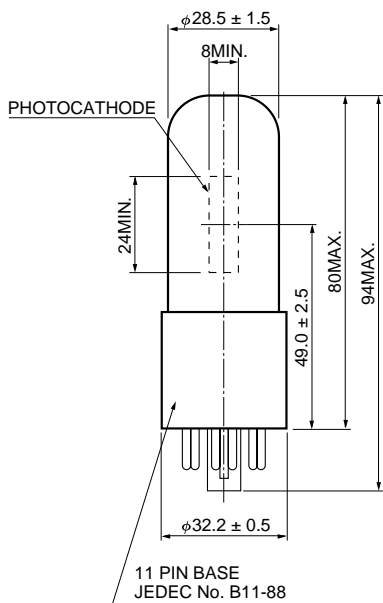


VOLTAGE DISTRIBUTION RATIO AND SUPPLY VOLTAGE

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

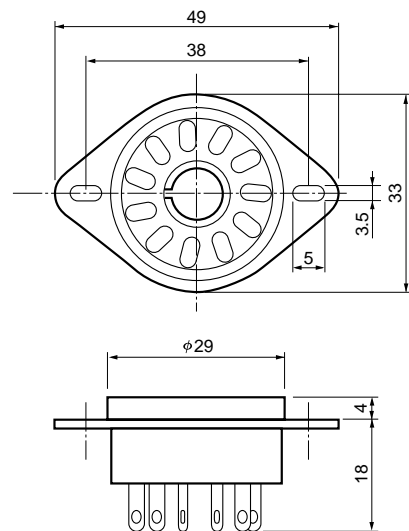
Supply Voltage: 1000Vdc, K: Cathode, Dy: Dynode, P: Anode

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



TPMSA0001EA

Socket (Option) (E678-11A)



TACCA0064EA

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