

HAMAMATSU

PHOTOMULTIPLIER TUBES R636-10, R758-10

UV to Near IR (R636-10:185 to 930 nm, R758-10:160 to 930nm) Spectral Response
28mm(1-1/8 Inch) Diameter, GaAs(Cs) Photocathode, 9-stage, Side-On Type

GENERAL

Parameter		R636-10	R758-10	Unit
Spectral Response		185 to 930	160 to 930	nm
Wavelength of Maximum Response		300 to 800		nm
Photocathode	Material	GaAs (Cs)		-
	Minimum Effective Area	3 × 12		mm
Window Material		UV glass	Fused silica 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(option)		-

MAXIMUM RATINGS (Absolute Maximum Values)

Parameter		Value	Unit
Supply Voltage	Between Anode and Cathode	1500	Vdc
	Between Anode and Last Dynode	250	Vdc
Average Anode Current		0.001	mA

CHARACTERISTICS (at 25°C)

Parameter		Min.	Typ.	Max.	Unit	
Cathode Sensitivity	Luminous(2856K)	400	550	-	μA/lm	
	Radiant	at 350nm	-	62	-	mA/W
		at 632.8nm	-	63	-	
		at 852.1nm	-	48	-	
Red/White Ratio (with R-68 filter)		-	0.53	-	-	
Gain		-	4.5 × 10 ⁵	-	-	
Anode Sensitivity	Luminous(2856K)	100	250	-	A/lm	
	Radiant	at 350nm	-	2.8 × 10 ⁴	-	A/W
		at 632.8nm	-	2.8 × 10 ⁴	-	
		at 852.1nm	-	2.2 × 10 ⁴	-	
Anode Dark Current at 10A/lm*		-	0.1	2	nA	
Time Response	Anode Pulse Rise Time	-	2	-	ns	
	Electron Transit Time	-	20	-	ns	

* After 30min. storage in darkness

NOTE: Anode characteristics are measured with the voltage distribution ratio shown below.

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 : 1250Vdc, K : Cathode, Dy : Dynode, P : Anode

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Figure 1: Typical Spectral Response

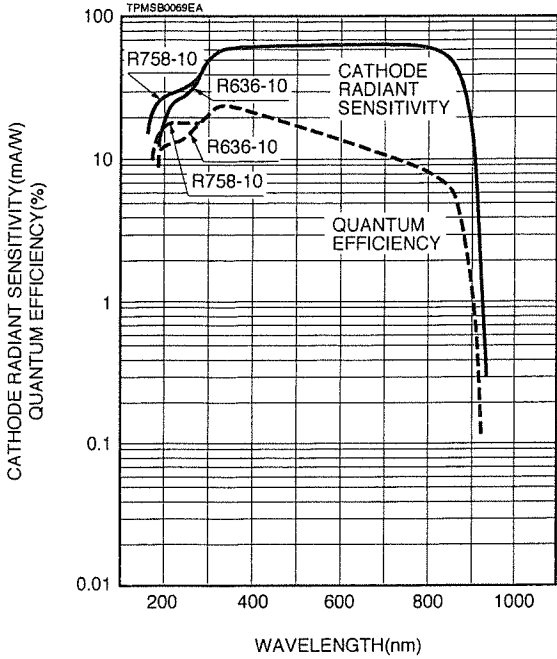


Figure 2: Typical Anode Sensitivity and Typical Gain

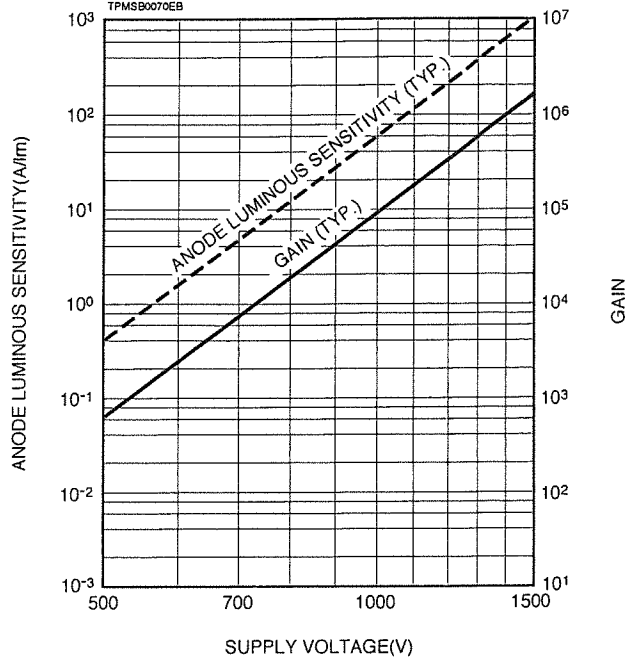
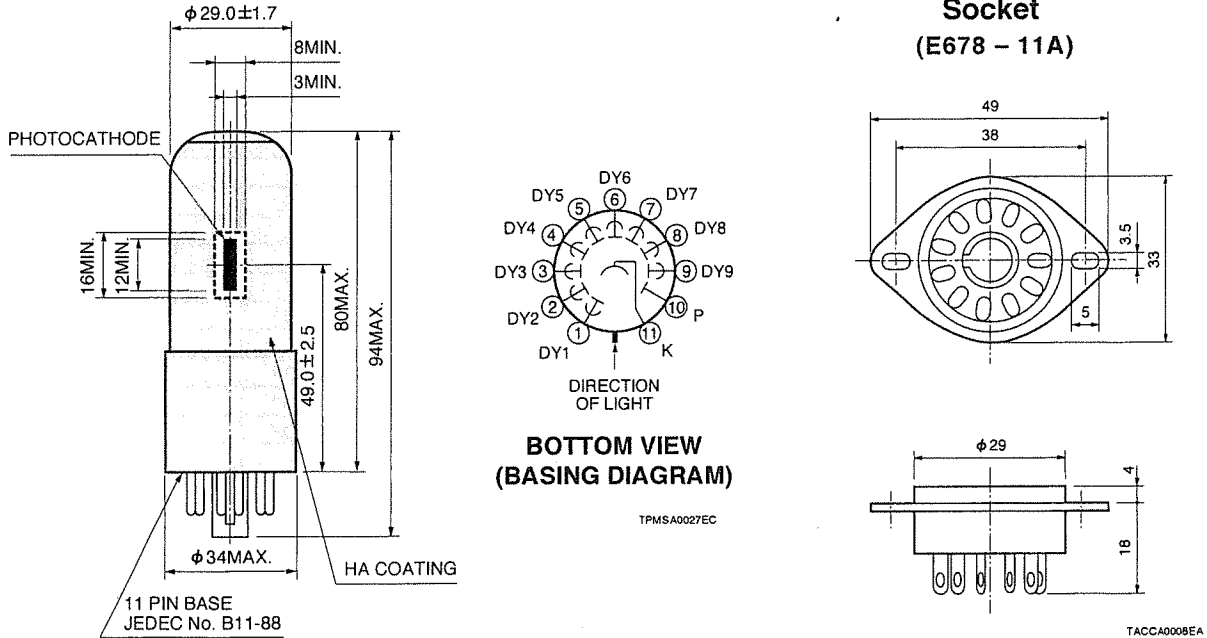


Figure 3: Dimensional Outline and Basing Diagram (Unit : mm)



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