

## FEATURES

- Short type
- High sensitivity  
Luminous ..... 100  $\mu$ A (R10601), 130  $\mu$ A (R10601-100)  
Radiant at 420 nm ..... 95 mA/W (R10601), 110 mA/W (R10601-100)

## APPLICATIONS

- Scintillation counting
- Gamma camera



## SPECIFICATIONS

### GENERAL

Parameter		Description / Value	Unit
Spectral response		300 to 650	nm
Wavelength of maximum response		420	nm
Window material		Borosilicate glass	—
Photocathode	Material	Bialkali (R10601), Super bialkali (R10601-100)	—
	Minimum effective area	$\phi$ 34	mm
Dynode	Structure	Box and linear-focus	—
	Number of stages	8	—
Operating ambient temperature		-30 to +50	$^{\circ}$ C
Storage temperature		-80 to +50	$^{\circ}$ C
Weight		Approx. 42	g

### MAXIMUM RATINGS (Absolute maximum values)

Parameter		Value	Unit
Supply voltage	Between anode and cathode	1250	V
	Between anode and last dynode	250	V
Average anode current		0.1	mA

### CHARACTERISTICS (at 25 $^{\circ}$ C)

Parameter		R10601			R10601-100			Unit
		Min.	Typ.	Max.	Min.	Typ.	Max.	
Cathode sensitivity	Luminous (2856 K)	80	100	—	110	130	—	$\mu$ A/lm
	Blue sensitivity index (CS 5-58)	10	11.5	—	12.5	13.5	—	—
	Radiant at 420 nm	—	95	—	—	110	—	mA/W
Anode sensitivity	Luminous (2856 K)	3	20	—	3	20	—	A/lm
	Radiant at 420 nm	—	$1.9 \times 10^4$	—	—	$1.7 \times 10^4$	—	A/W
Quantum efficiency at peak wavelength		—	28	—	32	35	—	%
Gain		—	$2.0 \times 10^5$	—	—	$1.5 \times 10^5$	—	—
Anode dark current (After 30 minute storage in darkness)		—	2	20	—	3	30	nA
Time response	Anode pulse rise time	—	5.3	—	—	5.3	—	ns
	Electron transit time	—	37	—	—	37	—	ns
Pulse linearity ( $\pm 2$ % deviation)		—	1	—	—	1	—	mA

**NOTE:** Anode characteristics are measured with a voltage distribution ratio and supply voltage shown below.

### VOLTAGE DISTRIBUTION RATIO AND SUPPLY VOLTAGE

Electrodes	K	G	Dy1	Dy2	Dy3	Dy4	Dy5	Dy6	Dy7	Dy8	P
Ratio	0.4	1.8	2	2	1	1	1	1	1	1	1

Supply voltage: 1000 V, K: Cathode, G: Grid, Dy: Dynode, P: Anode

# PHOTOMULTIPLIER TUBE R10601, R10601-100

Figure 1: Typical spectral response

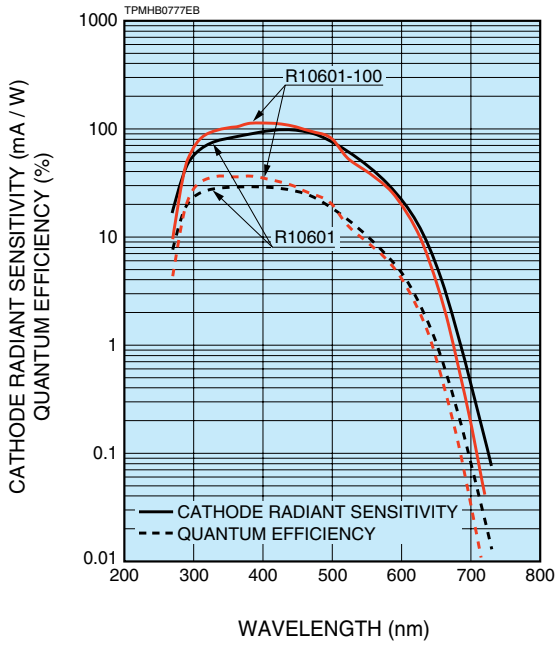


Figure 2: Typical gain

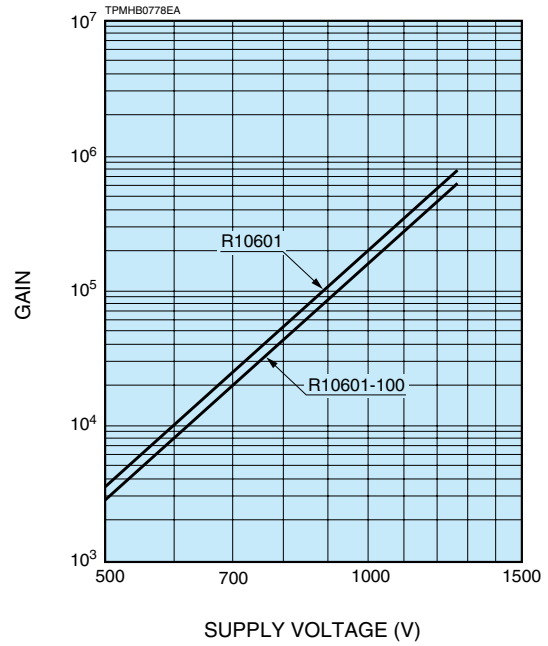
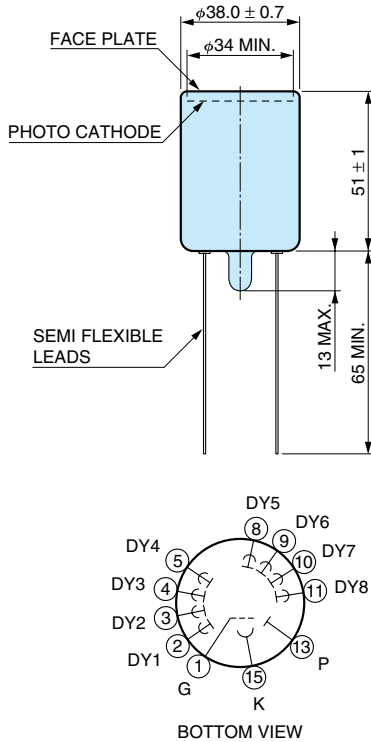


Figure 3: Dimensional outline and basing diagram (Unit: mm)



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