

**High Speed Response (Rise Time = 0.7ns, TTS = 0.16ns FWHM)
25mm (1 Inch) Diameter, 10 - stage, Multialkali Photocathode, Head - On Type**

GENERAL

Parameter		Description/Value	Unit
Assembled Photomultiplier Tube		R5322	—
Spectral Response		300 to 850	nm
Wavelength of Maximum Response		420	nm
Photocathode	Material	Multialkali	—
	Minimum Effective Area	20	mm dia.
Window Material		Borosilicate glass	—
Dynode	Structure	Linear focused	—
	Number of Stages	10	—
Case		Magnetic shield case	—

MAXIMUM RATINGS (Absolute Maximum Values)

Parameter		Description/Value	Unit
Supply Voltage	Between Anode and Cathode	-2500	Vdc
Voltage Divider Current		0.36	mA
Average Anode Current		0.016	mA
Ambient Temperature		-30 to +50	°C

CHARACTERISTICS (at 25 °C)

Parameter		Min.	Typ.	Max.	Unit
Cathode Sensitivity	Luminous (2856 K)	80	120	—	μA/lm
	Radiant at 420 nm	—	51	—	mA/W
Anode Sensitivity	Luminous (2856 K)	—	150	—	A/lm
Gain		—	1.3×10^6	—	—
Anode Dark Current (after 30 min. storage in darkness)		—	100	400	nA
Time Response	Anode Pulse Rise Time	—	0.7	—	ns
	Electron Transit Time	—	10	—	ns
	Transit Time Spread (FWHM)	—	0.16	—	ns

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

VOLTAGE DISTRIBUTION RATIO AND SUPPLY VOLTAGE

Electrode	K	G	Dy1	Dy2	Dy3	Dy4	Dy5	Dy6	Dy7	Dy8	Dy9	Dy10	P
Ratio		1.3	4.8	1.2	1.8	1	1	1	1	1	1.5	3	2.5

Supply Voltage: -2250 Vdc, K: Cathode, Dy: Dynode, P: Anode, G: Grid
Acc to be connected to Dy7

PHOTOMULTIPLIER TUBE ASSEMBLY H7313

Figure 1: Typical Spectral Response

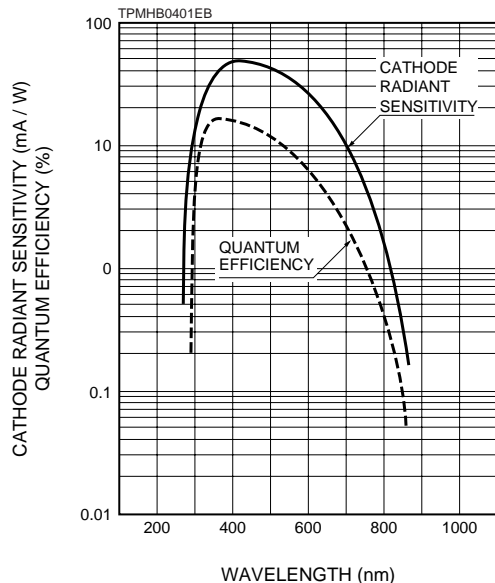


Figure 2: Typical Gain and Anode Dark Current

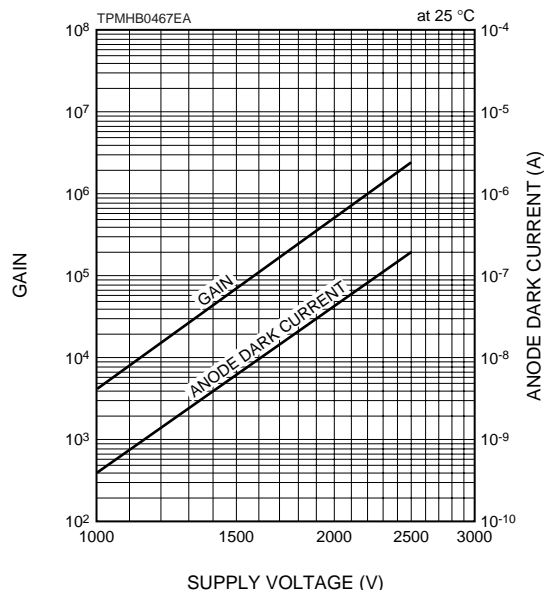
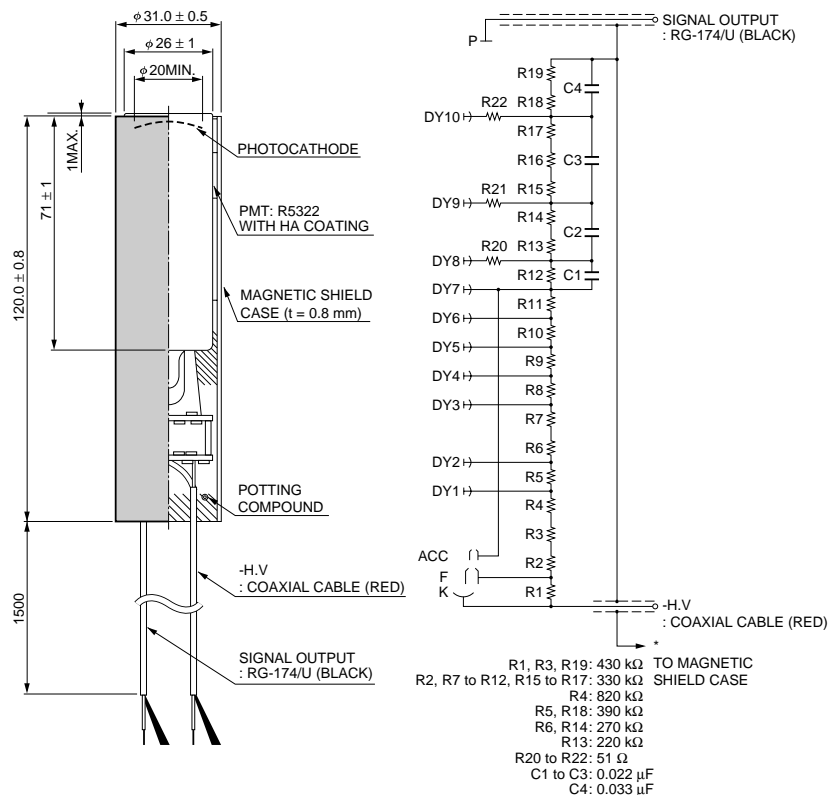


Figure 3: Dimensional Outline and Circuit Diagram (Unit: mm)



* MAGNETIC SHIELD IS CONNECTED TO GND INSIDE OF THIS PRODUCT. TPMHA0418EA

HAMAMATSU

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