

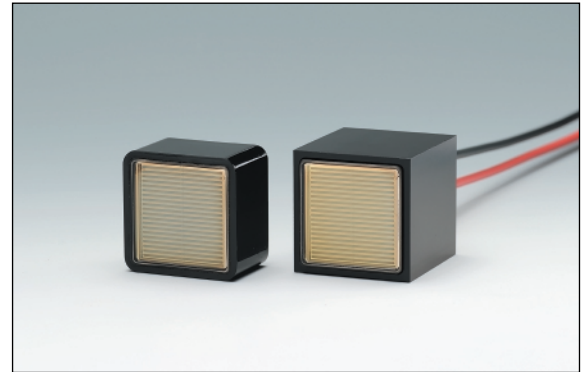
**High Speed Response, 30 mm Square
Super Bialkali and Ultra Bialkali Photocathode
Metal Channel Dynode 12-stage, Head-on Type**

FEATURES

- Wide Effective Area: 23 mm × 23 mm
- High Speed Response
- Compact
- Light Weight: Approx. 31 g (R11265U Series)
Approx. 74 g (H11934 Series)
- R11265 Series with Divider Circuit (H11934 Series)

APPLICATIONS

- High Energy Physics
- Scintillation Counting



Left: R11265U series, Right: H11934 series

Figure 1: Typical Spectral Response

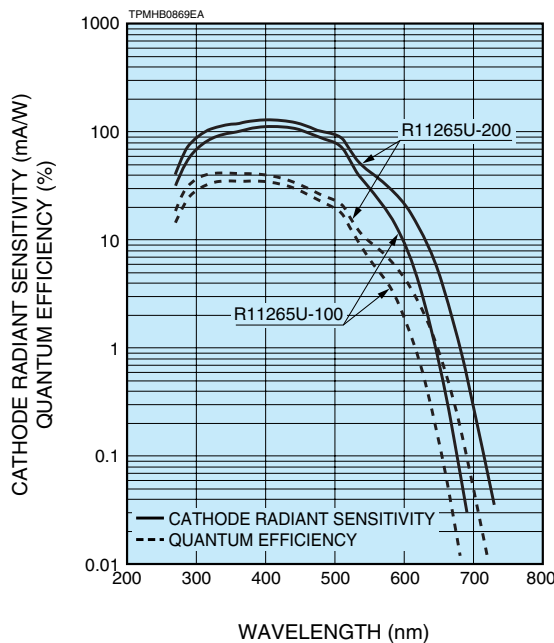
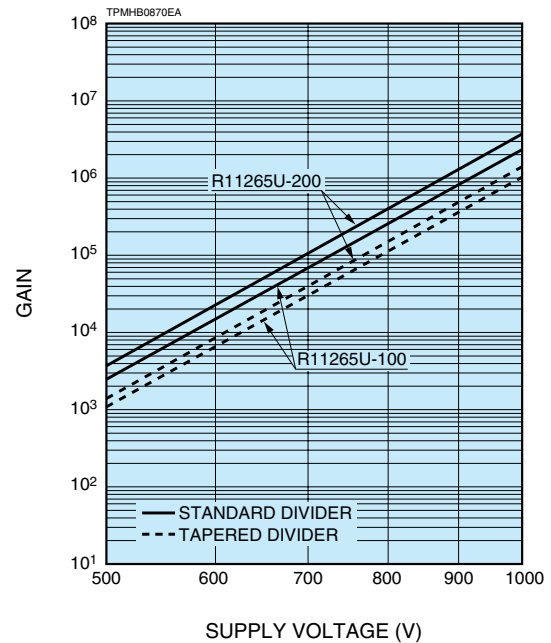


Figure 2: Typical Gain



PHOTOMULTIPLIER TUBES AND PHOTOMULTIPLIER TUBE ASSEMBLIES

R11265U SERIES / H11934 SERIES

Type No.	Spectral Response		Photo-cathode Material	Window Material	Dynode Structure / Stages	Maximum Ratings		Cathode Characteristics					Anode to Cathode Supply Voltage (V)
	Range (nm)	Peak Wavelength (nm)				Supply Voltage Between Anode and Cathode (V)	Average Anode Output Current in Total (mA)	Luminous		Blue Sensitivity Index (CS 5-58) Typ.	[Ⓔ] Quantum Efficiency	[Ⓔ] Radiant	
								Min. (μA/lm)	Typ. (μA/lm)		Typ. (%)	Typ. (mA/W)	
R11265U-100	300 to 650	400	SBA	K	MC/12	-1000	0.1	75	95	13.5	35	110	-900
R11265U-200	300 to 650	400	UBA	K	MC/12	-1000	0.1	75	120	15.5	43	130	-900
H11934-100	300 to 650	400	SBA	K	MC/12	-1000	0.018	75	95	13.5	35	110	-900
H11934-200	300 to 650	400	UBA	K	MC/12	-1000	0.018	75	120	15.5	43	130	-900
H11934-100-10	300 to 650	400	SBA	K	MC/12	-1000	0.018	75	95	13.5	35	110	-900
H11934-200-10	300 to 650	400	UBA	K	MC/12	-1000	0.018	75	120	15.5	43	130	-900

NOTE: (A) SBA: Super bialkali, UBA: Ultra bialkali (B) K: Borosilicate glass (C) MC: Metal channel

(D) Quantum efficiency is measured at the peak sensitivity wavelength (350 nm).

(E) Cathode radiant sensitivity is measured at the peak sensitivity wavelength (400 nm).

Figure 3: Time Response (Example)

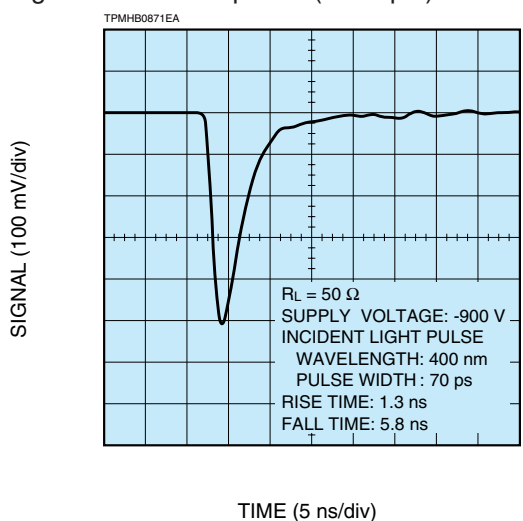


Figure 4: Single Photon Counting (Example)

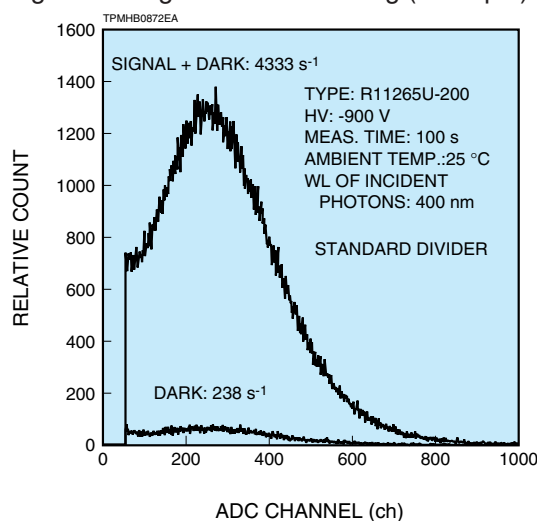
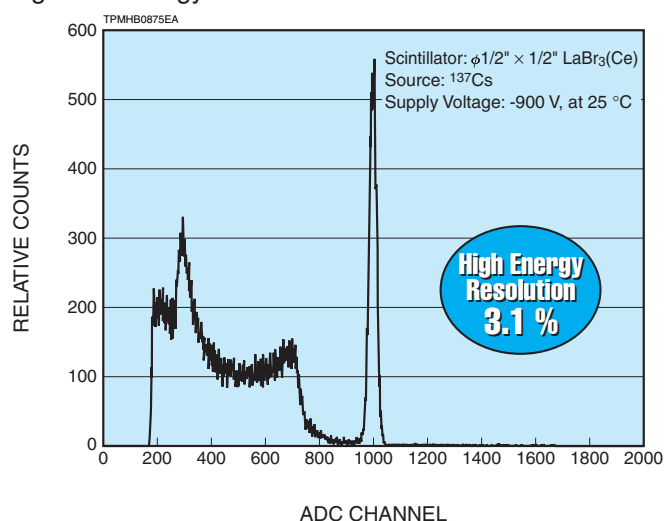


Figure 5: Energy Resolution



Typical Energy Resolution for Metal Package PMTs

	R7600U-200	R8900U-100	R11265U-200
⁵⁷ Co	7.7 %	8.4 %	7.4 %
¹³⁷ Cs	3.2 %	3.5 %	3.1 %

Scintillator: φ1/2" LaBr₃(Ce)

Anode Characteristics								Pulse Linearity		Operating Ambient Temperature	Storage Temperature	Type No.
Luminous		Gain	Dark Current (After 30 min)		Time Response							
Min. (A/lm)	Typ. (A/lm)		Typ.	Typ.	Max. (nA)	Rise Time Typ. (ns)	Transit Time Typ. (ns)	T.T.S. Typ. (ns)	±2 % Deviation (mA)			
15 (10)	80 (35)	8.4×10^5 (3.7 × 10 ⁵)	2	20	1.3	5.8	0.27 (0.30)	20 (300)	60 (400)	-30 to +50	-30 to +50	R11265U-100
15 (10)	160 (60)	1.3×10^6 (5.0 × 10 ⁵)	2	20								R11265U-200
15 (10)	80 (35)	8.4×10^5 (3.7 × 10 ⁵)	2	20						0 to +50	-15 to +50	H11934-100
15 (10)	160 (60)	1.3×10^6 (5.0 × 10 ⁵)	2	20			H11934-200					
(10)	(35)	(3.7 × 10 ⁵)	2	20			H11934-100-10					
(10)	(60)	(5.0 × 10 ⁵)	2	20			H11934-200-10					

() : Measured with the special voltage distribution ratio (Tapered Divider) shown below.

VOLTAGE DISTRIBUTION RATIO AND SUPPLY VOLTAGE

Electrodes	K	Dy1	Dy2	Dy3	Dy4	Dy5	Dy6	Dy7	Dy8	Dy9	Dy10	Dy11	Dy12	P
Standard Divider Type	2.5	1.3	0.8	0.8	1	1	1	1	1	1	1	1	1	0.5
Tapered Divider Type	3.3	1.6	1	1	1	1	1	1	1	1	1	1	2.7	1.3

Supply Voltage: -900 V, K: Cathode, Dy: Dynode, P: Anode

Figure 6: T.T.S. Characteristic (Example)

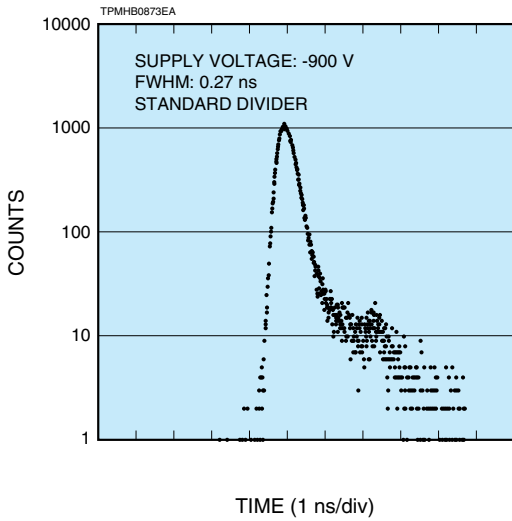


Figure 7: Effect of Magnetic Fields on Anode Output (Example)

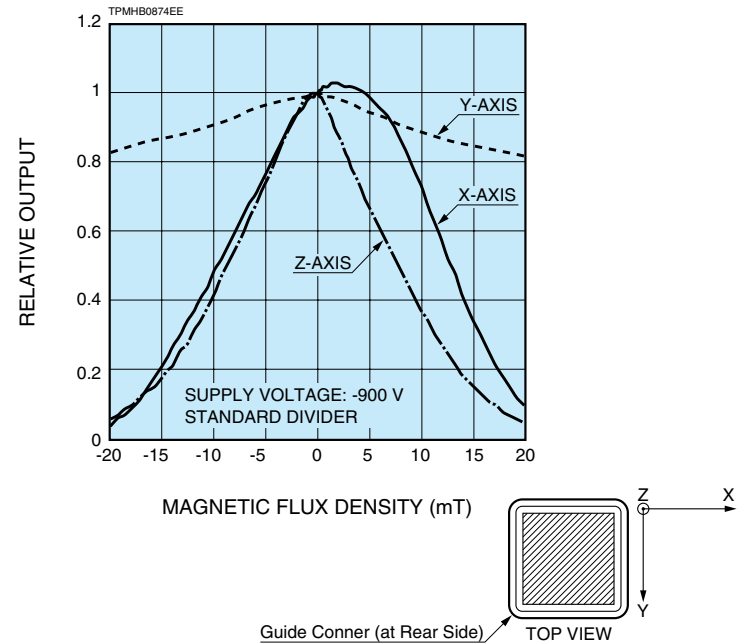
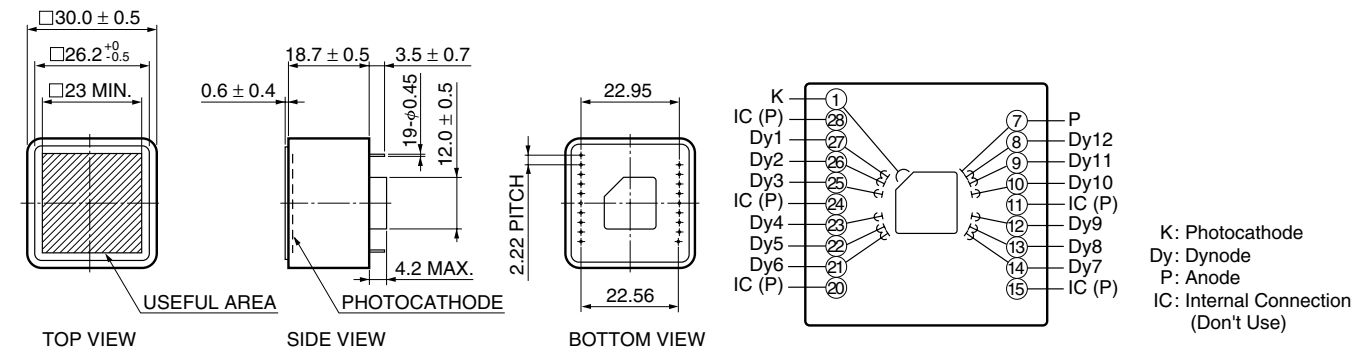


Figure 8: Dimensional Outline and Basing Diagram (Unit: mm)

● R11265U Series

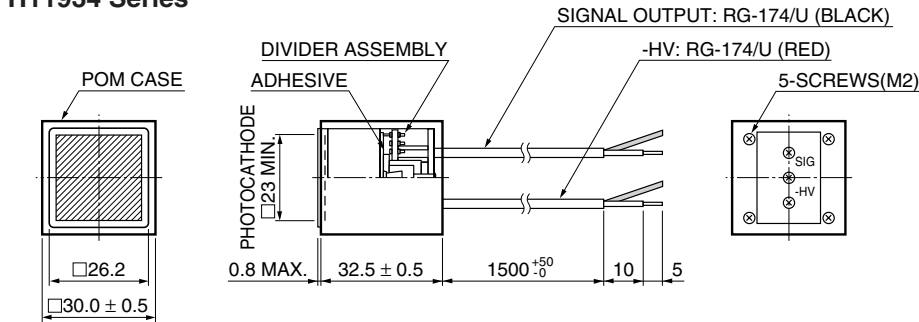


PHOTOMULTIPLIER TUBES AND PHOTOMULTIPLIER TUBE ASSEMBLIES

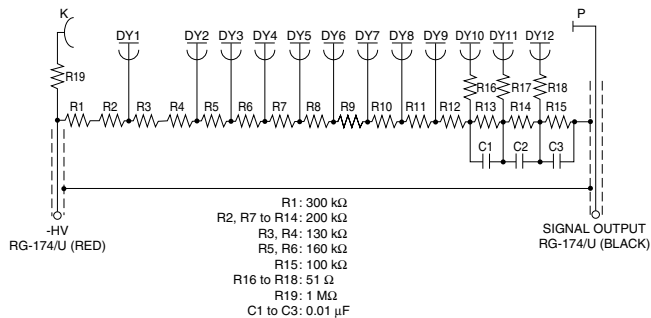
R11265U SERIES / H11934 SERIES

Figure 9: Dimensional Outline and Circuit Diagram (Unit: mm)

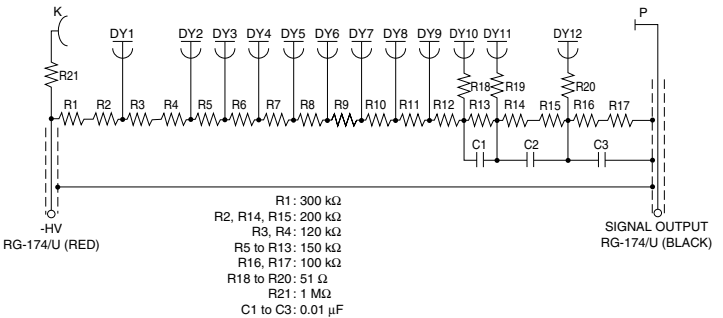
● H11934 Series



H11934-100/-200



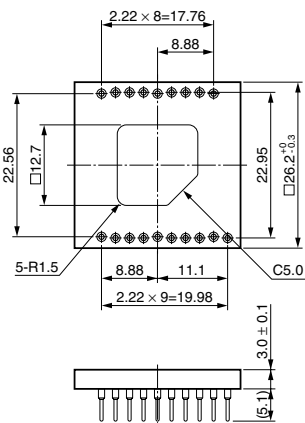
H11934-100-10/-200-10



TPMHA0586EA

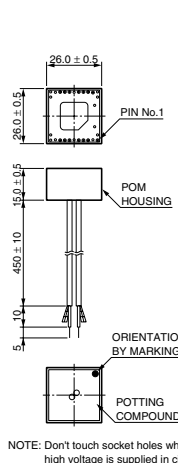
[ACCESSORIES] (Unit: mm) **SOLD SEPARATELY**

● Socket E678-19K

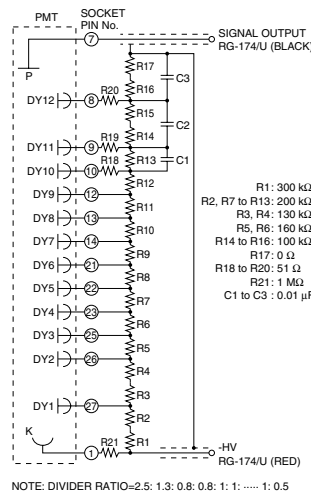


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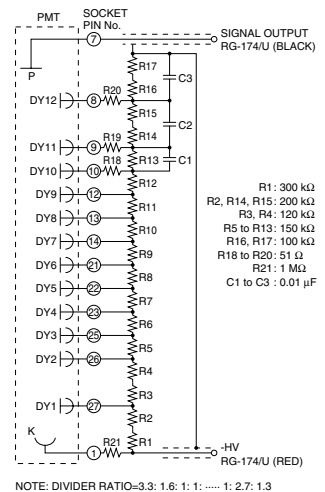
● Socket Assemblies E11807, E11807-01



E11807



E11807-01



TACCA0314EA

⚠ WARNING ~ High Voltage ~

The product is operated at high voltage potential. Further, the metal housing of the product is connected to the photocathode (potential) so that it becomes a high voltage potential when the product is operated at a negative high voltage (anode grounded). Accordingly, extreme safety care must be taken for the electrical shock hazard to the operator or the damage to the other instruments.

* C4900 and C4900-01 can be used for R11265U series / H11934 series.

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MAR. 2013 IP