

FEATURES

- Fast time response
- High time resolution
- Compact profile
- Long life time

APPLICATIONS

- LIDAR (Light Detection and Ranging)
- TCSPC (Time-Correlated Single Photon Counting)
- High energy physics



SPECIFICATIONS

GENERAL

Parameter		Description / Value	Unit
Spectral response		160 to 850	nm
Wavelength of maximum response		430	nm
Window material		Synthetic silica	—
Photocathode	Material	Multialkali	—
	Effective area	φ11	mm
MCP	Dynode structure	2 stages Microchannel plate	—
	Channel diameter	6	μm
Operating ambient temperature ^(A)		-50 to +50	°C
Storage temperature ^(A)		-50 to +50	°C

MAXIMUM RATINGS (Absolute maximum values)

Parameter	Value	Unit
Supply voltage	-2400	V
Average anode current	100	nA

CHARACTERISTICS (at 25 °C 1900 V)

Parameter		Min.	Typ.	Max.	Unit
Cathode sensitivity	Luminous (2856 K)	100	180	—	μA/lm
	Red / White ratio	—	0.15	—	—
Anode sensitivity		—	100	—	A/lm
Gain		—	5.6 × 10 ⁵	—	—
Anode dark current (After 30 minutes storage in darkness)		—	2	10	nA
Time response	Rise time	—	190	—	ps
	Fall time	—	360	—	ps
	Width	—	290	—	ps
	T.T.S. (FWHM) ^(B)	—	40	—	ps

NOTE: ^(A)No condensation

^(B)Transit-time spread (T.T.S.) is the fluctuation in transit time between individual pulse and specified as an FWHM (full width at half maximum) with the incident light having a single photoelectron state.
This value negligible the jitter of the electronics about 30 ps.

PHOTOMULTIPLIER TUBE ASSEMBLY H15547-07

Figure 1: Typical spectral response

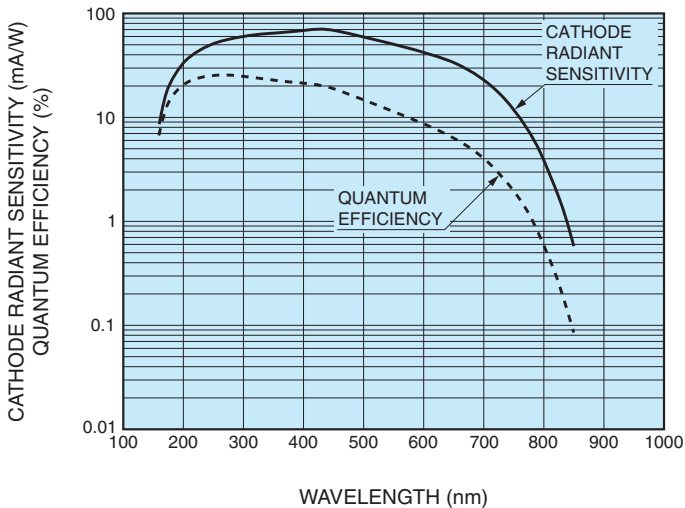


Figure 2: Typical gain

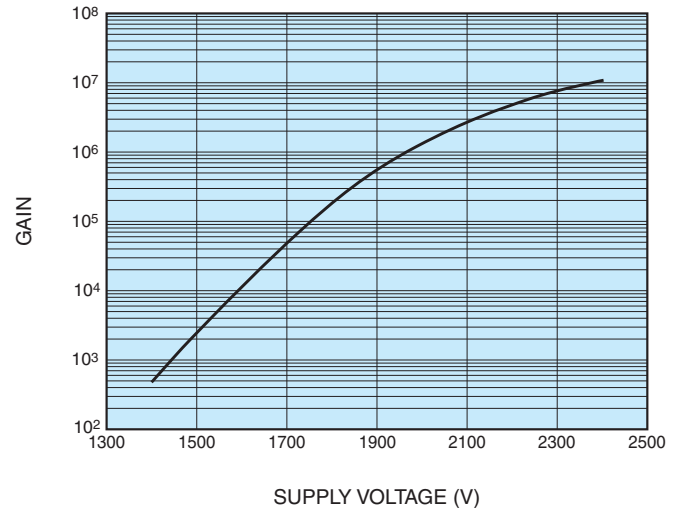


Figure 3: Typical output waveform

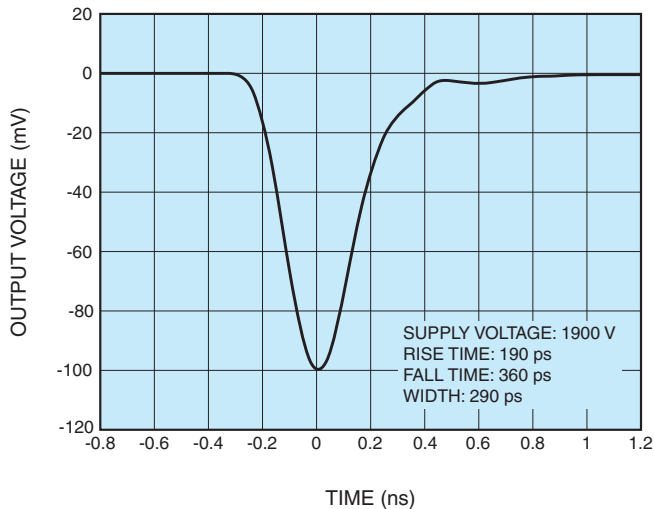


Figure 4: Typical transit time spread

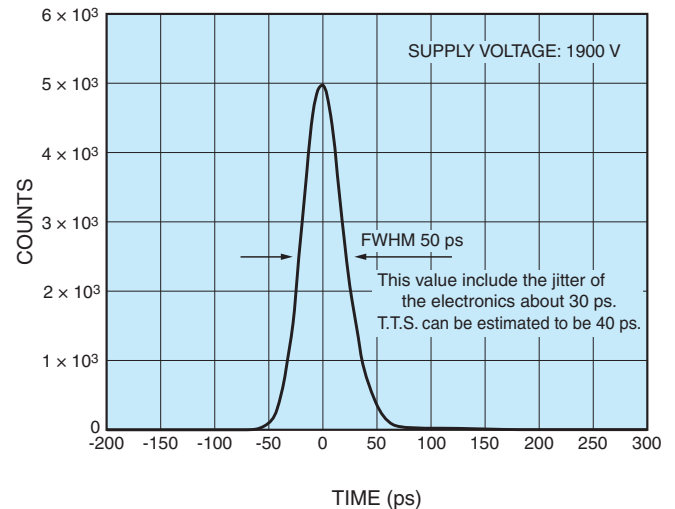
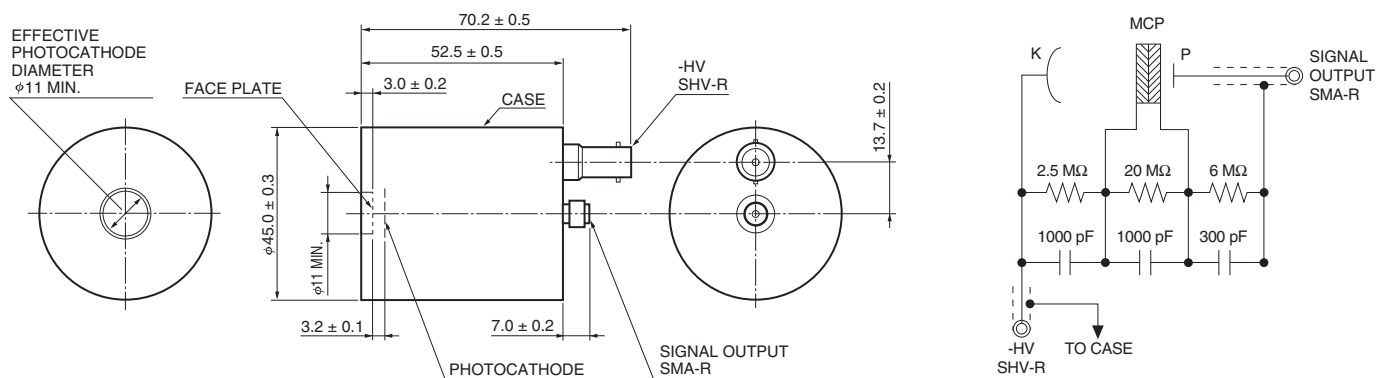


Figure 5: Dimensional outlines (Unit: mm)



Case is connected to GND inside of this product.

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